



Contaminant Screening Study Libby Asbestos Site, Operable Unit 4 Libby, Montana

**Draft Final Summary Report
for City of Libby Alley Investigation**

February 2005



Summary Report

**Response Action Contract
for Remedial, Enforcement Oversight, and Non-Time
Critical Removal Activities at Sites of Release or
Threatened Release of Hazardous Substances
in EPA Region 8**

U.S. EPA Contract No. 68-W5-0022

**Draft Final Summary Report
City of Libby Alley Investigation,
Contaminant Screening Study,
Libby Asbestos Site, Operable Unit 4**

February 3, 2005

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Work Assignment No.: 137-RIRI-08BC

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Acronyms

CDM	CDM Federal Programs Corporation
CSS	contaminant screening study
EPA	U. S. Environmental Protection Agency
LA	Libby amphibole
PLM	polarized light microscopy
QA/QC	quality assurance/quality control
QC	quality control
SAP	sampling and analysis plan
SRC	Syracuse Research Corporation
VE	visual area estimation
%	percent

Section 1

Introduction

The purpose of this report is to summarize the field activities for the City of Libby alley investigation that took place between October 15 and October 24, 2003.

As part of the Libby asbestos site remedial investigation, CDM Federal Programs Corporation (CDM) conducted an investigation of the alley ways within the City of Libby to determine the nature and extent of Libby amphibole (LA) asbestos contamination. All investigation activities were conducted in accordance with the Final Sampling and Analysis Plan (SAP), Remedial Investigation (CDM Federal Programs Corporation [CDM] 2003a) and Final Sampling and Analysis Plan Addendum for the City of Libby Alley Investigation (SAP Addendum) (CDM 2003b).

This summary report presents visual inspection results, site-specific surface soil sampling data, and verbal interview information collected as part of this investigation.

Section 2

Field Activities

The Libby alley investigation consisted of a visual inspection for vermiculite, surface soil sampling, and verbal interview with the city supervisor. Unless noted in Section 3.1 (Deviations from the SAP Addendum), all field documentation and sample collection procedures provided or referenced in the SAP Addendum were followed. The following sections summarize the alley investigation field activities.

2.1 Visual Inspection

The CDM field team inspected 128 alley ways within the City of Libby for the presence or absence of vermiculite (Figure 1). All inspection data was recorded on field sample data sheets and in field log notes. The surface material (e.g., asphalt, gravel, sand, soil, etc.) of each alley was also noted in the field log notes. Copies of the log notes are provided in Appendix A.

The alleys inspected by the CDM field team are illustrated on Figure 1 and identified on Table 1. Three additional alleys (126, 127, and 128) not mentioned in the SAP Addendum were identified and inspected during the investigation, and are included in this report. Field personnel observed vermiculite in 23 percent (%) of Libby alleys at the time of inspection. The following information summarizes the observations made by the field team:

- vermiculite was observed in soils adjacent to 3 paved alleys
- vermiculite was observed in the surface material of or in soils adjacent to 22 non-paved alleys
- vermiculite was not observed in 27 paved alleys
- vermiculite was not observed in 69 non-paved alleys

It should be noted that for all 25 alley ways containing visible vermiculite, an adjacent property to the alley way also contained visible vermiculite. That is, the vermiculite observed in the alley way appeared to have migrated from an adjacent property that contained vermiculite. It is not suspected that vermiculite was used as a base material or surface material for alley construction.

2.3 Soil Sampling

Soil samples were collected, prepared, and analyzed in accordance with procedures presented or referenced in the SAP Addendum, including completion of soil field sample data sheets (Appendix B). Soil samples were not collected from paved alleys. In total, 91 surface soil samples were collected from the 0-6 inch interval during this investigation (Figure 1).

As applicable to all soil samples collected under the Libby remedial investigation program, soil samples were analyzed for LA asbestos using two techniques: polarized light microscopy (PLM) visual area estimation (VE) and the PLM gravimetric method (Syracuse Research Corporation [SRC] 2003). The U.S. Environmental Protection Agency (EPA) is in the process of evaluating the accuracy and replicability of each of these methods. However, based on EPA's performance evaluation study to date, PLM-VE results are currently being used to make project remediation decisions. For the purposes of this report, only PLM-VE results are presented.

All sample results were nondetect for LA (by PLM-VE) with the exception of CS-17979, which was trace (less than 0.2 percent) for LA. Sample CS-17979 was collected from alley 47 (see Figure 1); no vermiculite was observed in this alley. Surface soil sample results are presented in Table 2.

2.3 Verbal Interview

In order to document LA contamination concerns and obtain historical information about the alleys, a verbal interview was conducted with Dan Thede, the city supervisor, on February 2, 2005. This information was recorded on an Information Field Form and in a field logbook. Copies of these records are provided in Appendix C. Details of the interview are as follows:

- Libby alley construction occurred during the late 1920s or early 1930s.
- Vermiculite was not brought in as a subbase or surfacing material during construction.
- Past or present, the city has not used vermiculite or material containing vermiculite to fill ruts. Fill material is currently obtained from the city pit located adjacent to the Plum Creek pit on Pipe Creek Road.
- Future alley way improvement activities (i.e., paving) are anticipated to be performed by the city. These activities may occur in conjunction with the downtown revitalization project and would involve alleys in the vicinity of Mineral Avenue.
- Mr. Thede has not received any phone calls from residents voicing concern about vermiculite in Libby alley ways.

Section 3

Quality Assurance/Quality Control

CDM has established a formal quality assurance program to ensure consistently high quality project deliverables under its Response Action Contract with EPA. For work conducted by CDM in Libby, quality assurance/quality control (QA/QC) measures include the collection of quality control (QC) samples (such as soil duplicate samples and equipment blanks), implementation of a laboratory quality assurance program, review of project reports by a CDM-approved quality assurance staff member, and an auditing component to assess the effectiveness of the quality assurance program. The following sections describe deviations from the SAP Addendum and the implications of those deviations on project or data quality objectives.

3.1 Deviations from the Sampling and Analysis Plan Addendum

All requirements detailed in the SAP Addendum were met with minimal exceptions. Noted deviations are as follows:

Deviation #1

One hundred twenty-five alleys were originally identified in the SAP Addendum as requiring inspection. However, during the field event, seven of these were determined to be part of private properties (e.g., driveways) that were investigated previously, or areas that are not currently being used as alley ways (e.g., areas that have been paved over for parking). These areas were not included in this investigation.

Implication of deviation: This deviation has no negative effect on project/data quality objectives.

Deviation #2

In addition to the field logbook requirement, the verbal interview was recorded on an Information Field Form. Use of the form is consistent with other contaminant screening study interviews conducted in Libby.

Implication of deviation: This deviation has a positive effect on retrievability of the verbal interview information since the form allows for permanent storage of the interview data in the project database.

Deviation #3

At the time of this report, air sample collection has not been completed. Based on information provided in this report, the alleys identified for each of the four categories as described in the SAP Addendum will be finalized. Once they are selected, air samples will be collected when weather permits.

Implication of deviation: Levels of LA in dust disturbed by typical alley traffic remains unknown. Once air samples are collected, CDM will evaluate the achievement of data quality objectives as outlined in the Phase 1 Sampling and Quality Assurance Project Plan (EPA 2000) for air sampling.

Deviation #4

A duplicate soil sample collection frequency of 4.6% was achieved versus the 5% requirement.

Implication of deviation: This deviation has no negative impact on overall project data quality since: 1) overall QC sample collection frequency for contaminant screening study (CSS) soil sampling will be evaluated in a separate QA/QC trend analysis report (CDM – in progress); and 2) results are 100% comparable between the parent samples and duplicates, indicating there are no precision issues with the field team's sample collection practices.

Deviation #5

An equipment blank was not collected on October 15, 2003.

Implication of deviation: No QC sample existed on October 15, 2003 to verify the effectiveness of decontamination procedures. However, LA was not detected in any field samples collected on October 15, 2003, nor was it detected in any of the equipment blanks during the investigation. Therefore, this deviation appears to have had no negative impact on the overall project data quality.

3.2 Achievement of Data Quality Objectives

Of the five deviations described above, one has a positive impact on data quality; three have no negative effect on data quality; and one is yet to be evaluated.

3.3 Data Validation and Reporting

None of the analytical data contained in this report was further validated beyond that performed by the laboratory as part of their QA/QC program. Therefore, it is assumed that the raw data are useable for their intended purpose, which is to determine the extent of LA asbestos contamination in alley ways within the City of Libby.

As stated in the SAP Addendum, following approval of this report, CDM will complete a letter to City of Libby detailing the results of the investigation and additional information regarding any necessary further activities. Air sampling results will be provided in a subsequent letter upon completion of that component of the investigation.

Section 4

References

CDM. 2003a. Final Sampling and Analysis Plan, Remedial Investigation, Libby Asbestos Site, Operable Unit 4. May.

_____. 2003b. Final Sampling and Analysis Plan Addendum for City of Libby Alley Investigation, Contaminant Screening Study, Libby Asbestos Site, Operable Unit 4, Libby, Montana. October.

_____. 2003c. Close Support Facility Soil Preparation Plan, Revision No. 1, Libby Asbestos Site, Operable Unit 4, Libby, Montana. March 24, 2004.

EPA. 2000. Sampling and Quality Assurance Project Plan Revision 1 for Libby, Montana, Environmental Sampling for Asbestos, Baseline Sampling for Source Area and Residential Exposure to Tremolite-Actinolite Asbestos Fibers. January.

SRC. 2003. Analysis of Asbestos Fibers in Soil by Polarized Light Microscopy. SRC-LIBBY-03 (Rev. 0). March 3, 2003.

Figure

CDM

Color Photo(s)

The following pages
contain color that does
not appear in the
scanned images.

To view the actual images, please
contact the Superfund Records
Center at (303) 312-6473.



Legend

Alley Sample Results, 0-6 Inches

- Non Detect
- Trace Libby Amphibole (<0.2%)
- Alley Not Paved, Visible Vermiculite (22)
- Alley Not Paved, No Visible Vermiculite (69)
- Alley Paved, Visible Vermiculite (3)
- Alley Paved, No Visible Vermiculite (27)
- Alley Not Present (7)



Feet

0 470 940 1,880

Figure 1
City of Libby
Alley Visual Inspection
and Surface Soil Sample Results
February 2005
Libby, Montana

CDM

Tables

Table 1 City of Libby Alley Investigation Visual Inspection Summary

Not Paved, visible vermiculite (22 alleys)	Not Paved, no visible vermiculite (69 alleys)	Paved, visible vermiculite (3 alleys)	Paved, no visible vermiculite (27 alleys)	Alley not present (7 alleys)
11	1	65	58	17
46	2	66	73	18
48	5	67	74	20
50	6	68		25
51	7	69		26
59	8	70		27
63	9	75		28
71	10	79		33
78	12	85		36
80	13	87		37
82	14	88		38
83	15	89		39
84	16	91		40
86	19	96		41
90	21	97		45
95	23	100		57
109	24	102		72
110	29	103		76
111	30	104		81
116	31	105		92
117	32	106		94
124	42	108		98
	43	113		99
	44	114		101
	47	115		107
	49	119		112
	52	120		118
	53	121		
	54	122		
	55	123		
	56	125		
	60	126		
	61	127		
	62	128		
	64			

Notes:

Alley numbers correspond to those shown on Figure 1

Paved alleys not sampled, per the Sampling and Analysis Plan Addendum (CDM 2003b)

Table 2 City of Libby Alley Investigation Surface Soil Sample Results

Sample ID	Parent ID	Address	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin	LA (%)
CS-17947-FG1		City of Libby Alley	Alley	Alley 1	Soil-Like	Surface soil	Field Sample	10/15/2003	PLM-VE	A	ND
CS-17948-FG1		City of Libby Alley	Alley	Alley 2	Soil-Like	Surface soil	Field Sample	10/15/2003	PLM-VE	A	ND
CS-17949-FG1		City of Libby Alley	Alley	Alley 5	Soil-Like	Surface soil	Field Sample	10/15/2003	PLM-VE	A	ND
CS-17950-FG1		City of Libby Alley	Alley	Alley 6	Soil-Like	Surface soil	Field Sample	10/15/2003	PLM-VE	A	ND
CS-17951-FG1		City of Libby Alley	Alley	Alley 7	Soil-Like	Surface soil	Field Sample	10/15/2003	PLM-VE	A	ND
CS-17952-FG		City of Libby Alley	Alley	Alley 8	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17953-FG		City of Libby Alley	Alley	Alley 126	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17954-FG		City of Libby Alley	Alley	Alley 9	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17955-FG		City of Libby Alley	Alley	Alley 10	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17956-FG		City of Libby Alley	Alley	Alley 11	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17957-FG		City of Libby Alley	Alley	Alley 12	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17958-FG		City of Libby Alley	Alley	Alley 13	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17959-FG		City of Libby Alley	Alley	Alley 14	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17960-FG1		City of Libby Alley	Alley	Alley 15	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17961-FG	CS-17960	City of Libby Alley	Alley	Alley 15	Soil-Like	Surface soil	Field Duplicate	10/16/2003	PLM-VE	A	ND
CS-17962-FG		City of Libby Alley	Alley	Alley 16	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17963-FG		City of Libby Alley	Alley	Alley 19	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17964-FG		City of Libby Alley	Alley	Alley 21	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17965-FG		City of Libby Alley	Alley	Alley 127	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17966-FG		City of Libby Alley	Alley	Alley 128	Soil-Like	Surface soil	Field Sample	10/16/2003	PLM-VE	A	ND
CS-17968-FG		City of Libby Alley	Alley	Alley 23	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17969-FG		City of Libby Alley	Alley	Alley 24	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17970-FG		City of Libby Alley	Alley	Alley 29	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17971-FG		City of Libby Alley	Alley	Alley 30	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17972-FG		City of Libby Alley	Alley	Alley 31	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17973-FG		City of Libby Alley	Alley	Alley 32	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17974-FG		City of Libby Alley	Alley	Alley 42	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17975-FG		City of Libby Alley	Alley	Alley 43	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17976-FG		City of Libby Alley	Alley	Alley 44	Soil-Like	Surface soil	Field Sample	10/17/2003	PLM-VE	A	ND
CS-17978-FG		City of Libby Alley	Alley	Alley 46	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17979-FG		City of Libby Alley	Alley	Alley 47	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	B1	TR
CS-17980-FG		City of Libby Alley	Alley	Alley 48	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17981-FG		City of Libby Alley	Alley	Alley 49	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17982-FG		City of Libby Alley	Alley	Alley 50	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17983-FG		City of Libby Alley	Alley	Alley 51	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17984-FG		City of Libby Alley	Alley	Alley 53	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17985-FG		City of Libby Alley	Alley	Alley 52	Soil-Like	Surface soil	Field Sample	10/18/2003	PLM-VE	A	ND
CS-17987-FG		City of Libby Alley	Alley	Alley 55	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17988-FG		City of Libby Alley	Alley	Alley 54	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17989-FG		City of Libby Alley	Alley	Alley 56	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17990-FG		City of Libby Alley	Alley	Alley 59	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17991-FG		City of Libby Alley	Alley	Alley 60	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17992-FG		City of Libby Alley	Alley	Alley 62	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17993-FG1	CS-17992	City of Libby Alley	Alley	Alley 62	Soil-Like	Surface soil	Field Duplicate	10/20/2003	PLM-VE	A	ND
CS-17994-FG1		City of Libby Alley	Alley	Alley 63	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17995-FG1		City of Libby Alley	Alley	Alley 61	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND

Sample ID	Parent ID	Address	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin	LA (%)
CS-17996-FG1		City of Libby Alley	Alley	Alley 64	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17997-FG1		City of Libby Alley	Alley	Alley 65	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17998-FG1		City of Libby Alley	Alley	Alley 66	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-17999-FG1		City of Libby Alley	Alley	Alley 67	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-18000-FG1		City of Libby Alley	Alley	Alley 68	Soil-Like	Surface soil	Field Sample	10/20/2003	PLM-VE	A	ND
CS-18002-FG1		City of Libby Alley	Alley	Alley 69	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18003-FG1		City of Libby Alley	Alley	Alley 70	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18004-FG1		City of Libby Alley	Alley	Alley 71	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18005-FG1		City of Libby Alley	Alley	Alley 75	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18006-FG1		City of Libby Alley	Alley	Alley 78	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18007-FG1		City of Libby Alley	Alley	Alley 79	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18008-FG1		City of Libby Alley	Alley	Alley 80	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18009-FG1		City of Libby Alley	Alley	Alley 82	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18010-FG1		City of Libby Alley	Alley	Alley 83	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18011-FG1		City of Libby Alley	Alley	Alley 84	Soil-Like	Surface soil	Field Sample	10/21/2003	PLM-VE	A	ND
CS-18013-FG		City of Libby Alley	Alley	Alley 85	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18014-FG		City of Libby Alley	Alley	Alley 87	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18015-FG		City of Libby Alley	Alley	Alley 89	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18016-FG		City of Libby Alley	Alley	Alley 86	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18017-FG		City of Libby Alley	Alley	Alley 90	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18018-FG		City of Libby Alley	Alley	Alley 88	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18019-FG		City of Libby Alley	Alley	Alley 91	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18020-FG1		City of Libby Alley	Alley	Alley 95	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18341-FG1		City of Libby Alley	Alley	Alley 96	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18342-FG1		City of Libby Alley	Alley	Alley 97	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18343-FG1		City of Libby Alley	Alley	Alley 100	Soil-Like	Surface soil	Field Sample	10/22/2003	PLM-VE	A	ND
CS-18345-FG1		City of Libby Alley	Alley	Alley 102	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18346-FG1		City of Libby Alley	Alley	Alley 119	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18347-FG1		City of Libby Alley	Alley	Alley 121	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18348-FG1		City of Libby Alley	Alley	Alley 122	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
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CS-18350-FG1	CS-18349	City of Libby Alley	Alley	Alley 120	Soil-Like	Surface soil	Field Duplicate	10/23/2003	PLM-VE	A	ND
CS-18351-FG1		City of Libby Alley	Alley	Alley 103	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18352-FG1		City of Libby Alley	Alley	Alley 104	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18353-FG1		City of Libby Alley	Alley	Alley 117	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18354-FG1		City of Libby Alley	Alley	Alley 105	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18355-FG1		City of Libby Alley	Alley	Alley 106	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18356-FG1		City of Libby Alley	Alley	Alley 115	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18357-FG		City of Libby Alley	Alley	Alley 116	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18358-FG		City of Libby Alley	Alley	Alley 123	Soil-Like	Surface soil	Field Sample	10/23/2003	PLM-VE	A	ND
CS-18360-FG		City of Libby Alley	Alley	Alley 109	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18361-FG		City of Libby Alley	Alley	Alley 114	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18362-FG		City of Libby Alley	Alley	Alley 113	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18363-FG		City of Libby Alley	Alley	Alley 111	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18364-FG		City of Libby Alley	Alley	Alley 108	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18365-FG		City of Libby Alley	Alley	Alley 110	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18366-FG		City of Libby Alley	Alley	Alley 124	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND

Sample ID	Parent ID	Address	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin	LA (%)
CS-18367-FG		City of Libby Alley	Alley	Alley 125	Soil-Like	Surface soil	Field Sample	10/24/2003	PLM-VE	A	ND
CS-18368-FG	CS-18367	City of Libby Alley	Alley	Alley 125	Soil-Like	Surface soil	Field Duplicate	10/24/2003	PLM-VE	A	ND
CS-17967-FG		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/16/2003	PLM-VE	A	ND
CS-17977-FG		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/17/2003	PLM-VE	A	ND
CS-17986-FG		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/18/2003	PLM-VE	A	ND
CS-18001-FG1		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/20/2003	PLM-VE	A	ND
CS-18012-FG1		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/21/2003	PLM-VE	A	ND
CS-18344-FG1		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/22/2003	PLM-VE	A	ND
CS-18359-FG		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/23/2003	PLM-VE	A	ND
CS-18369-FG		NA	Blank	NA	Soil-Like	Silica Sand	Equipment Blank	10/24/2003	PLM-VE	A	ND

Notes:

The report excludes all laboratory quality control sample results, such as those associated with lab blanks, lab duplicates, re-preparation, re-count same, re-count different, verified analysis, etc.

For LA Bin descriptions, refer to the Close Support Facility Soil Preparation Plan (CDM 2003c).

FG or FG1 = fine ground

NA = not applicable

PLM-VE = polarized light microscopy - visual estimation

LA = Libby amphibole

ND = nondetect

Appendix A

Field Log Notes

Location ALLEY #1 Date 10-15-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOLE

SOIL SAMPLES FOR ALLEY #1

WEST SIDE STAIRING POINT

50' 10-15-03

15-11

CS- 17947

SP- 124353

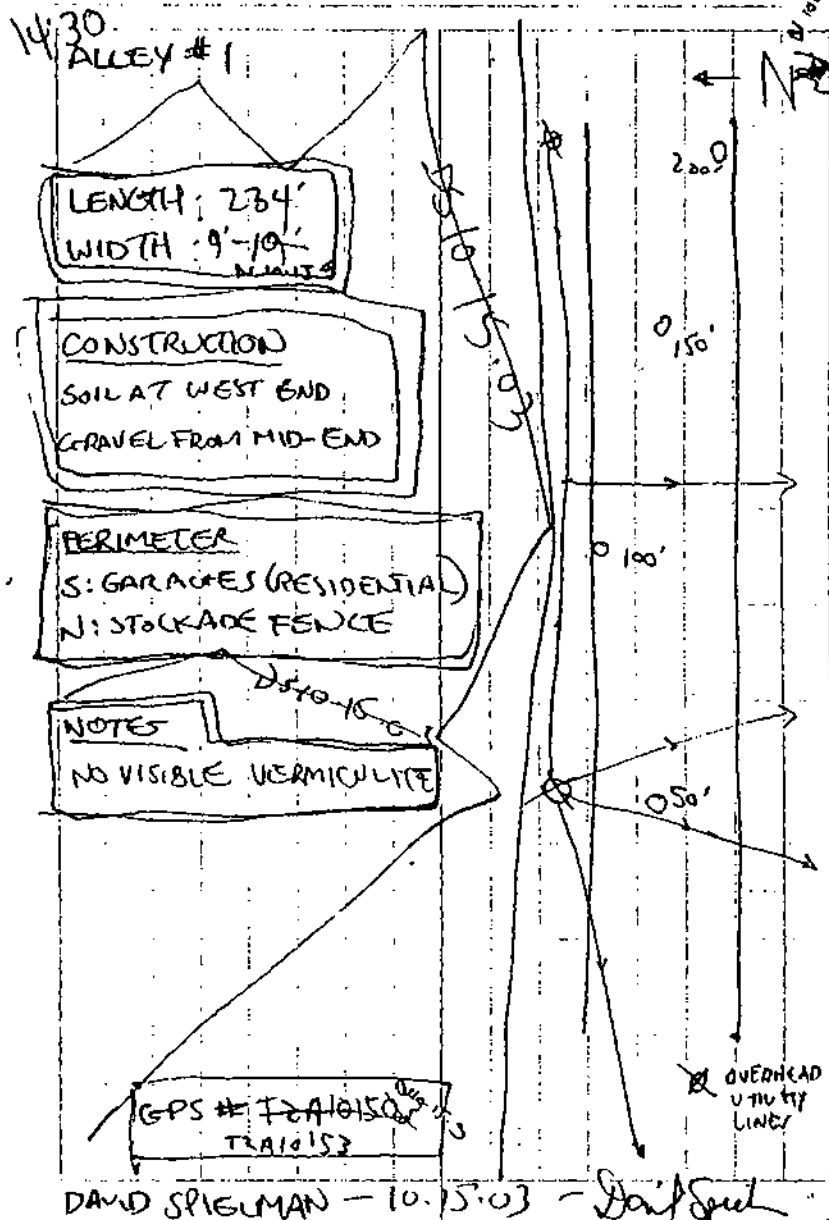
100' 10-15-03

150' 10-15-03

200' 10-15-03

DAVID SPIELMAN - 10-15-03 - Soil Spcl

Location ALLEY #1 Date 10-15-03 23
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOLE



DAVID SPIELMAN - 10-15-03 - Soil Spcl

Location ALLEY #2 Date 10-15-03
Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

VS 10-15-03
15:21 ON SITE
LENGTH: 301 FT.
WIDTH: 16 FT.

CONSTRUCTION:

WEATHERED SOIL,
GRASS STRIP IN MIDDLE
PERIMETER (RESIDENTIAL)
N: STOCKADE FENCE
S: WIRE FENCE + GARAGE

VS 10-15-03
~~NOTES~~ TWO ONE-DRIVENAYS

CS- 17948

SP- 124354

SAMPLE EQUIPMENT DECON.
ACCORDING TO SAP 10-15-03

SAMPLED AT 15:40

GPS# TZB101503
TZB10153 10-15-03

FIRE HYDRANT
O- SAMPLE
SUB- POINTS

(UTILITY POLE/
OVERHEAD LINES)

DAVID SPIELMAN - 10-15-03 - David Spiel

Location ALLEY #3 & #4, #5 Date 10-15-03 25
Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

16:00 ON SITE - ALLEY #3 AND ALLEY #4 ARE ACTUALLY
PART OF 214 COLORADO AVE PROPERTY, AND WERE
SAMPLED AS DRIVEWAY AND BACK YARD (DANNY
ZAMBRANO REPORTS HE AND BOB HUNT DID THIS.)

ALLEY #5

16:06 ON SITE
LENGTH: 300 FT
WIDTH: 9' AT E. ENTRANCE

CONSTRUCTION

WEATHERED GRAVEL
AND SOIL.

PERIMETER (RESIDENTIAL)

N: WIRE FENCES, ONE
GARAGE - 10-15-03
S: PARKING, 2 CARS
ONE HOME - 10-15-03

CS- 17949

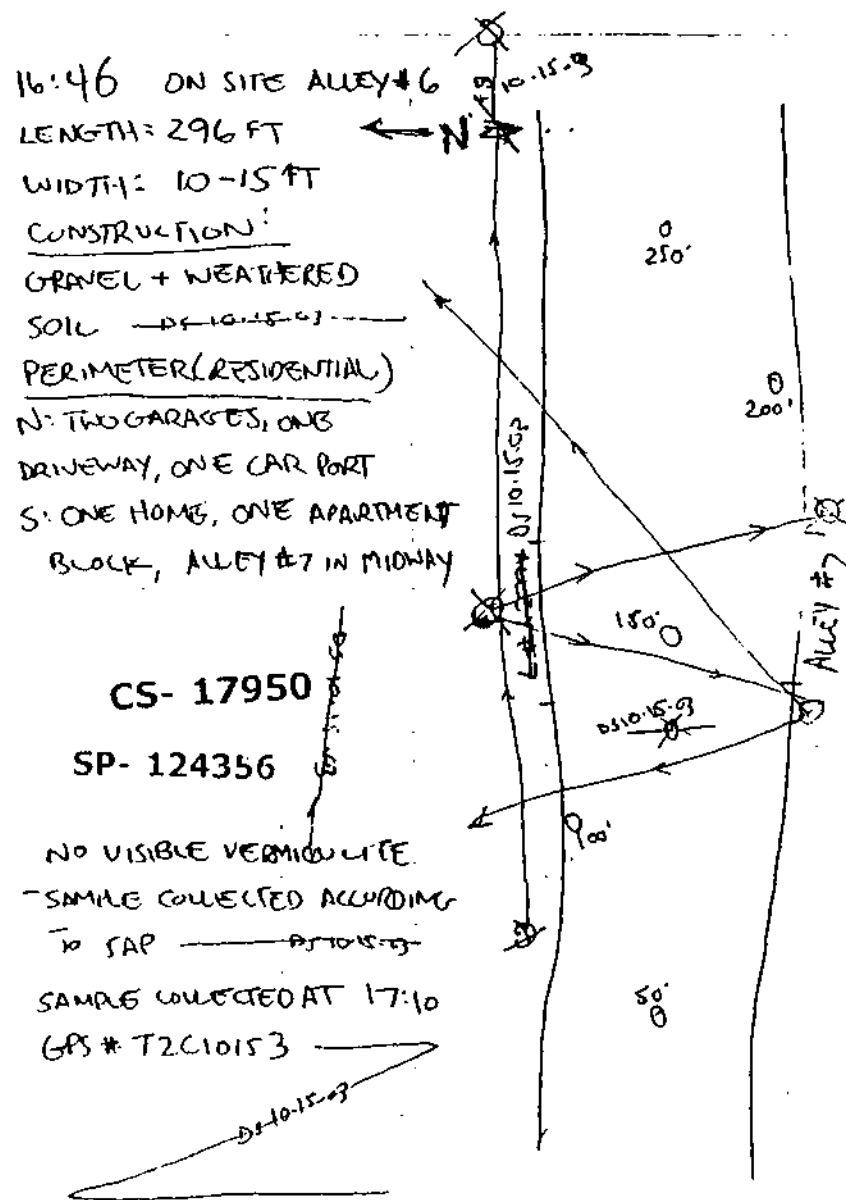
SP- 124355

NO WIRE VERMICULITE
SAMPLE COLLECTED ACCORDING
TO SAP. SAMPLE TIME 16:37

GPS# TZB10153

DAVID SPIELMAN - 10-15-03 - David Spiel

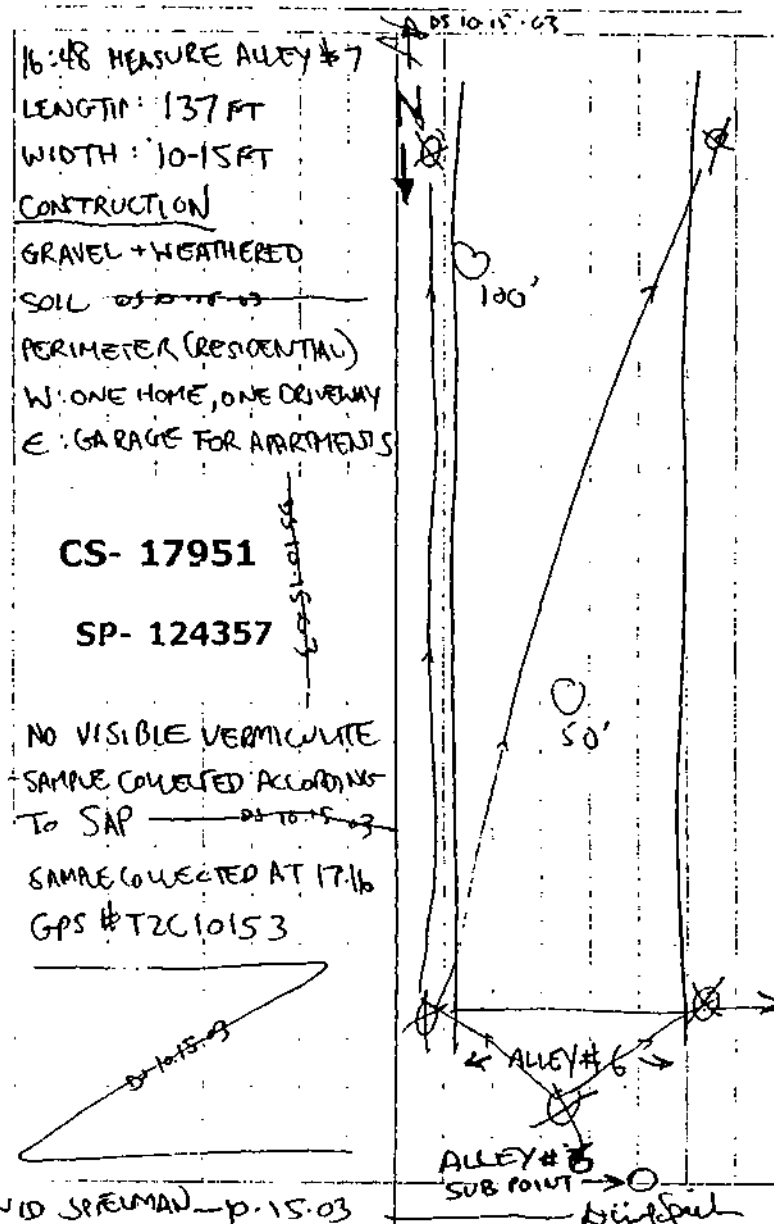
Location ALLEY #6 Date 10.15.03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
1015



DAVID SPIELMAN - 10.15.03

David Spiel

Location ALLEY #7 Date 10.15.03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
1015



DAVID SPIELMAN - 10.15.03

David Spiel

Use 10-16-03
Date 10-15-03

Location ALLEY#8

Project / Client LIBBY ASBESTOS PROJECT

EPA REG-8
VOLUME

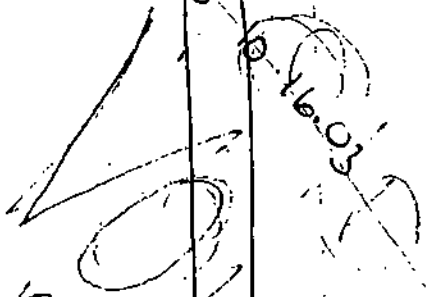
DS 10-16-03
MAIN AVE
IDAHO AVE
MA
DS 10-16-03

0942 ARRIVE ALLEY#8

LENGTH: 293 FT

WIDTH: 10-15 FT

CONSTRUCTION:



DRIVEWAY
ONTO
MAIN
0910-11-03
W-2ND

DRIVEWAY
ONTO
MAIN
0910-11-03
W-2ND

MAIN AVE

Location ALLEY#8

Project / Client LIBBY ASBESTOS PROJECT

Date 10-16-03

31

EPA REG-8
VOLUME

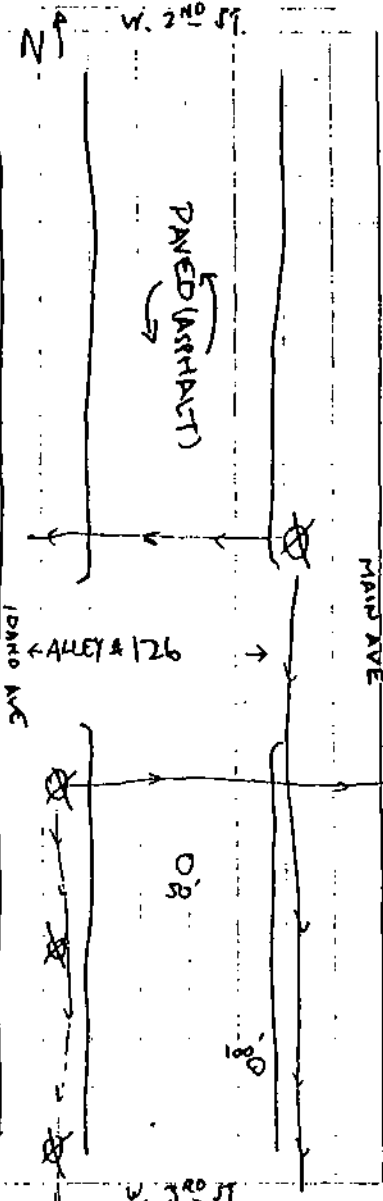
0942 ARRIVE ALLEY#8
LENGTH: 293 FT / 153 FT
WHOLE ALLEY UNPAVED
WIDTH: 10-15 FT
CONSTRUCTION: PEA-
GRAVEL ON SOIL, SOME
DEGRADED ASPHALT PATCHES
(SOUTH HALF OF ALLEY)
(NORTH HALF OF ALLEY)
ASPHALT (SOUTH HALF OF ALLEY)
PERIMETER (RESIDENTIAL)
W: APT. BLOCK, OPEN PARKING
ONE HOME
E: APT. BLOCK'S CARPORTS

CS- 17952

SP- 124358

- ① SAMPLE EQUIPMENT DECONTAMINATED ACCORDING TO SAP
- ② SAMPLE TIME: 10:16
- ③ NO VISIBLE VERMICULITE
- ④ ONLY UNPAVED PORTION SAMPLED
- ⑤ GPS # T2A10143
- ⑥ FSDS # 006100

DAVID SPIELMAN 10/16/03



0.8

100'

W. 3RD ST

Location

ALLEY #126

Date 10-16-03

Project / Client

LIBBY ASBESTOS PROJECT
EPA REG-8
DOEPE

10:20 ON SITE ALLEY 126

LENGTH: 300 FT

WIDTH: 10-16 FT

CONSTRUCTION: PEA-GRAVEL

ON SOIL, SOME DEGRADED

ASPHALT PATCHES - PRIMING

PERIMETER: (RESIDENTIAL)

N: APT. BLOCK (SIDE WALL)

ONE RESIDENT GARAGE

S: LAWN, APT. BLOCK

CS- 17953

SP- 124359

① NO VISIBLE VERMICULITE

② SAMPLE EQUIPMENT DECONTAMINATED
ACCORDING TO THE SAP

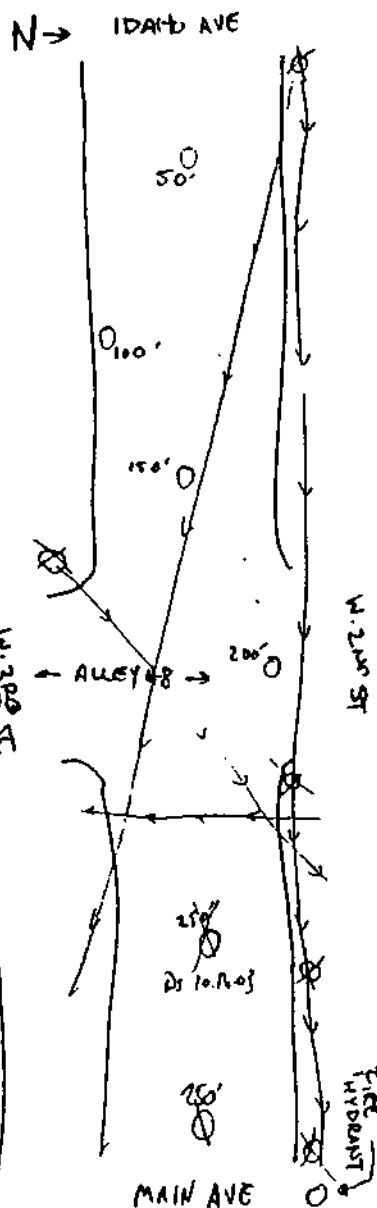
③ SAMPLE COLLECTION 10:35

④ FSDS 006100

⑤ GPS T2AD163

10-16-03

DAVID SPEERMAN 10-16-03



Location

ALLEY #9

Date 10-16-03

Project / Client

LIBBY ASBESTOS PROJECT
EPA REG-8
DOEPE

10:54 ON SITE ALLEY #9

LENGTH: 310 FT

WIDTH: 12 FT.

CONSTRUCTION: PACKED

GRAVEL + SOIL - 10-16-03

PERIMETER: (RESIDENTIAL)

W: SHEDS, SCRAP AUTOS + DEBRIS

E: HOMES / GARAGES

CS- 17954

SP- 124360

① NO VISIBLE VERMICULITE

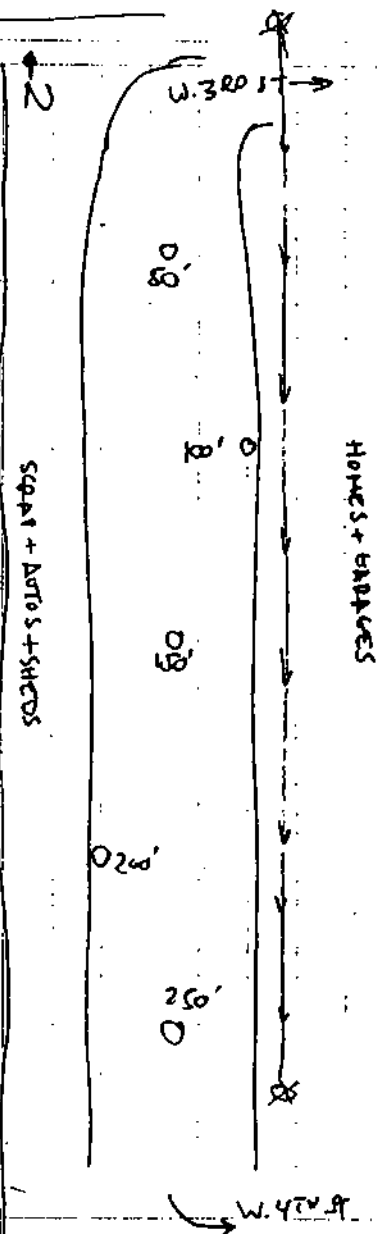
② SAMPLE EQUIPMENT DECONTAMINATED
ACCORDING TO THE SAP

③ SAMPLE COLLECTION 11:10

④ FSDS 006100

⑤ GPS T2B10163

DAVID SPEERMAN 10-16-03



Location ALLEY #10

Date 10-16-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

11:18 ON-SITE ALLEY #10

LENGTH: 218 FT.

WIDTH: 14 FT.

CONSTRUCTION: SOIL WITH GRAVEL 'PUSHED IN' (NATURAL

MEAN WITH GRASS, LEAVES, TWIGS IN THE ALLEYWAY)

PERIMETER: (RESIDENTIAL)

E: SHRUBS/BACK OF TREES ON COLORADO AVE.

W: CREEK BED

CS- 17955

SP- 124381

SAMPLE COLLECTED 11:35

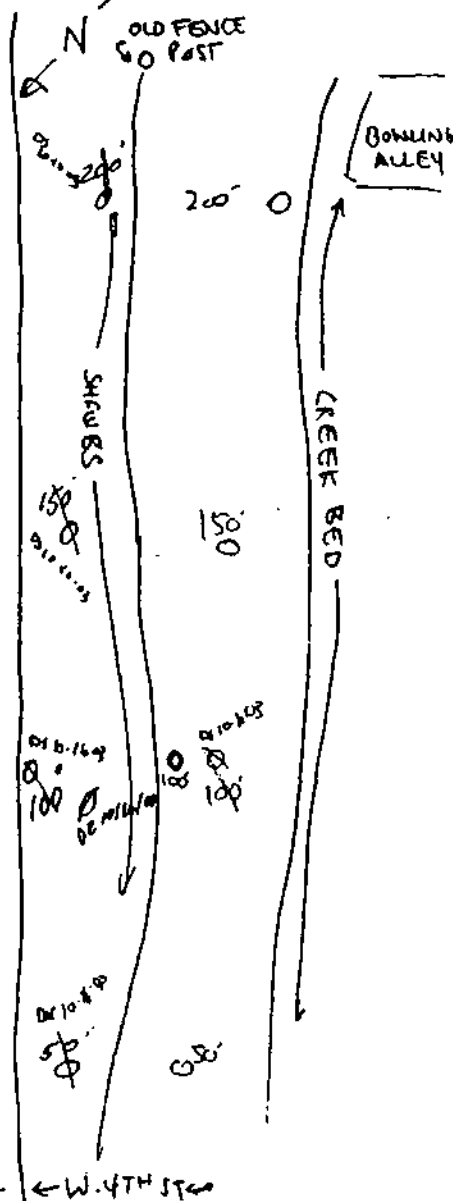
① NO VISIBLE VERMICULITE

② SAMPLE EQUIPMENT IS DECONTAMINATED AS/PER SAP

③ FSDS # CSS-S-006101

④ GPS # T2C10163

DAVID SPIELMAN 10-16-03



Location ALLEY #11

Date 10-16-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

11:42 ON-SITE ALLEY #11

LENGTH: 297

WIDTH: 12

CONSTRUCTION: PACKED

SOIL AND GRAVEL

PERIMETER: (RESIDENTIAL)

W: HEDGEROW, GARAGE,

ONE DRIVEWAY/YARD

E: STOCKADE FENCE,

SHED/CAMPER PAD

CS- 17956

SP- 124382

① NO VISIBLE VERMICULITE

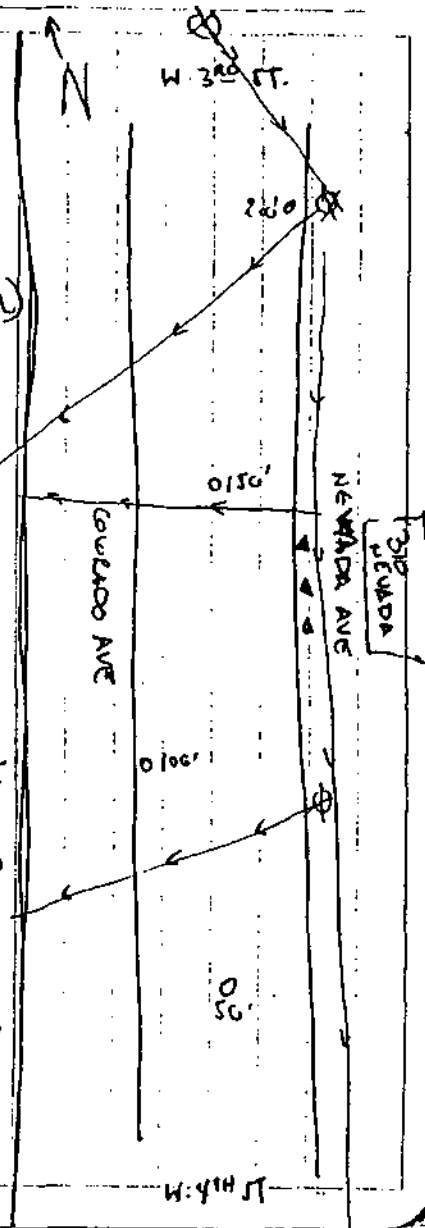
② SAMPLE EQUIPMENT IS DECONTAMINATED AS/PER SAP

③ FSDS # CSS-S-006101

④ GPS # T2C10163

- JACKHAMMER NOT REQUIRED, RAIN SOAKED SOIL IS SFT.

DAVID SPIELMAN 10-16-03

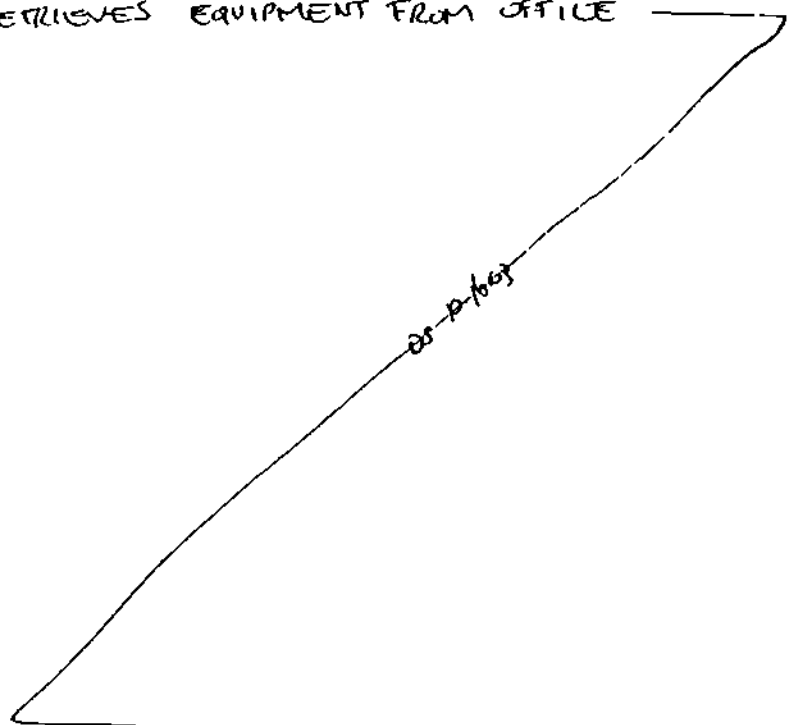


Location ALLEY #11 Date 10-16-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOLPE

12:02 VISIBLE VERMICULITE ("MEDIUM" AMOUNT)
 IN A 10 FT PATCH OF SOIL ON THE EAST SIDE
 OF ALLEY IN GRASS - APPEARS TO BE FORMER
 FLOWERBED OR GARDEN USE. NOW STOCKADE
 FENCE SEPARATES PPTY FROM ALLEY. ASSOCIATED
 WITH PROPERTY (BACKYARD) OF 310 NEVADA AVE.

12:05 - LUNCH

12:40 : TEAM REPLENISHES WATER (DRINKING),
 RETRIEVES EQUIPMENT FROM OFFICE



DAVID SPIELMAN - 10.16.03 - David Spielman

Location ALLEY #12 Date 10-16-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOLPE

13:09 ON SITE ALLEY #12
 LENGTH: 215 FT
 WIDTH: 14 FT
 CONSTRUCTION: PACKED SOIL
 PERIMETER: (RESIDENTIAL)
 W. BACKYARDS / SHEDS
 E. BACKYARDS / SHEDS
 S. ENDS AT BACK YARD
 OPEN SPACE FOR VEH.

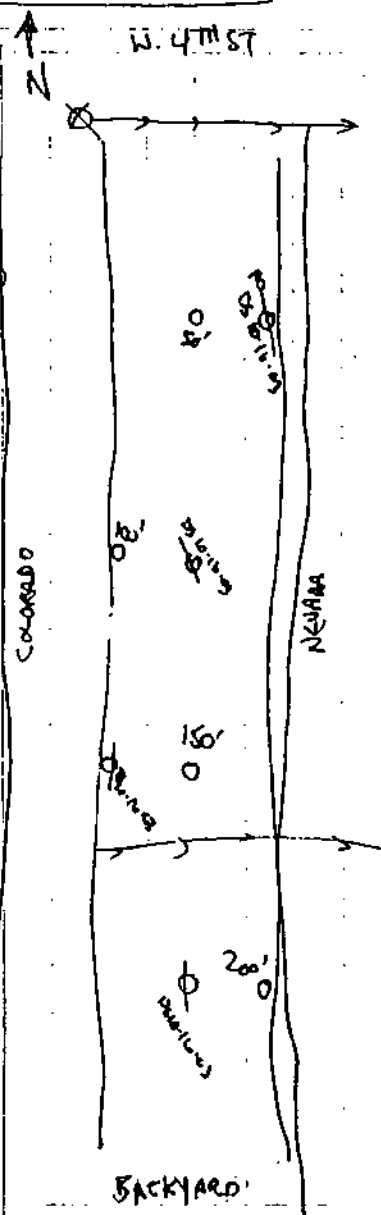
CS- 17957

SP- 124383

- ① NO VISIBLE VERMICULITE
 ② SAMPLE EQUIPMENT IS
 DECONTAMINATED
 ACCORDING TO THE JAP
 ③ FDS # CS-S-00001
 ④ GPS # TLE10163
 ⑤ NO JACKHAMMER, PICK BAR
 TO DIG SAMPLING.

SAMPLE TIME
 13:20

DAVID SPIELMAN - 10.16.03 - David Spielman



ALLEY #13

10.16.03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME

ALLEY #14

10.16.03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME

13:34 ON SITE ALLEY #13

DIMENSIONS: 29.4 FT. X 14 FT.

CONSTRUCTION: HARD PACKED

SOIL: DT-10-16-03

PERIMETER (RESIDENTIAL)

W: HOMES/BACKYARDS

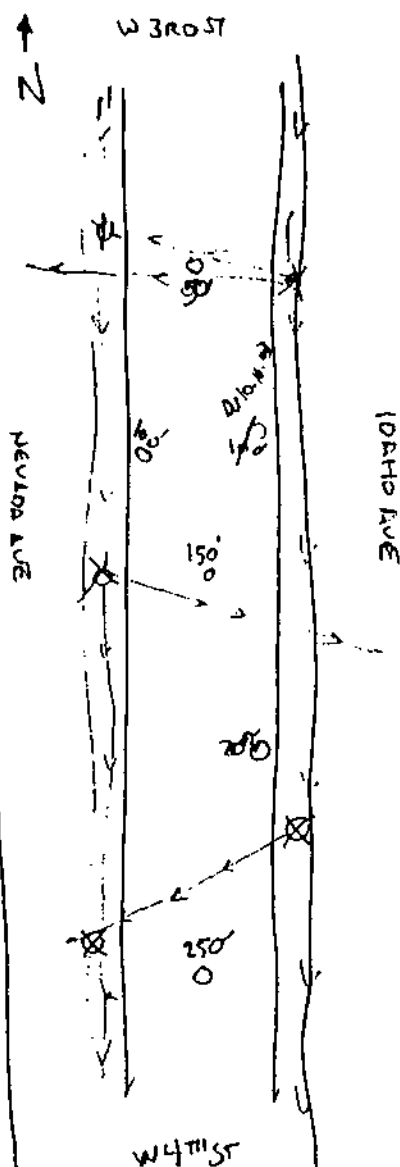
E: HOMES/YARDS/DRIVEWAYS

SAMPLE TIME
13:52
CS- 17958
SP- 124384

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ SAMPLE TOOL: BREAKER BAR
- ④ FSDS # CS-5-006102
- ⑤ GPS# T2F10163

ADDITIONAL INFORMATION

NO VIS. BLDG 10.16.03 NONE



14:00 ON SITE ALLEY #14

DIMENSIONS: 300 FT. X 15 FT.

CONSTRUCTION: PACKED SOIL

PERIMETER: (RESIDENTIAL)

W: HOMES/YARDS/CAR PORT

E: HOMES/YARDS/CAR PORT

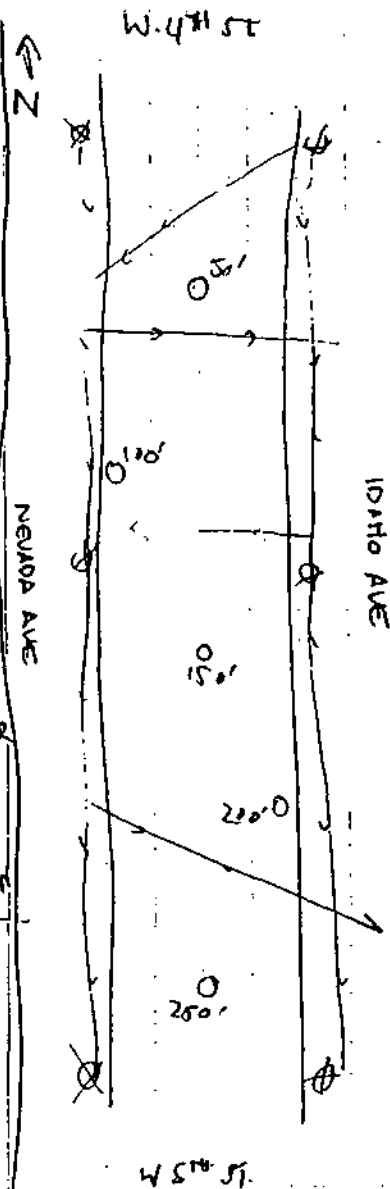
CS- 17959

SP- 124385

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ SAMPLE TOOL: BREAKER BAR
- ④ FSDS # CS-5-006102
- ⑤ GPS# T2G-10163

ADDITIONAL INFORMATION

NONE



DAVID SPIELMAN 10.16.03

DAVID SPIELMAN 10.16.03

Location ALLEY #15

Date 10-16-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

14:19 ON SITE ALLEY #15

DIMENSIONS: 29 FT x 14 FT

CONSTRUCTION: PACKED SOIL
PERIMETER: (RESIDENTIAL)

W: YARDS/HOMES/DRIVEWAYS

E: PARKING/HOMES/YARDS

SP- 124386

CS- 17960

CS- 17961

SP- 124386

- ① NO VISIBLE VERMICULITE
 ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
 ③ FSDS # CSS-S-006073
 ④ GPS # TZ10163

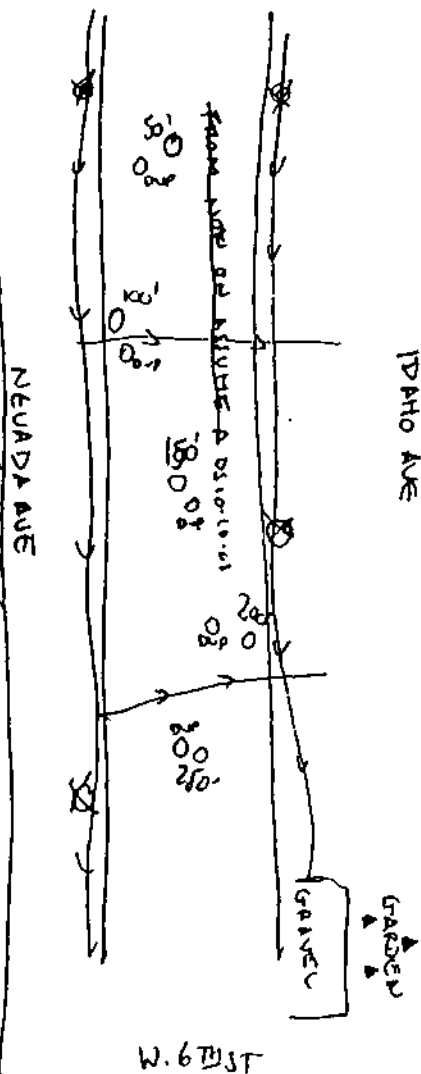
ADDITIONAL NOTES

GARDEN ~ 10 FT EAST OF
 ALLEY AT SE CORNER
 (IDAHO AND W 6TH SIDE)

HAS VISIBLE VERMICULITE

DAVID SPIELMAN 10-16-03 DSJ

N · W 5TH ST



Location ALLEY #16

Date 10-16-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

14:50 ON SITE ALLEY #16

DIMENSIONS: 29.3 x 16 FT

CONSTRUCTION: PACKED SOIL
PERIMETER (RESIDENTIAL)

W: YARDS/FENCE/HOMES

E: YARDS/PARKING/HOMES

CS- 17962

SP- 124387

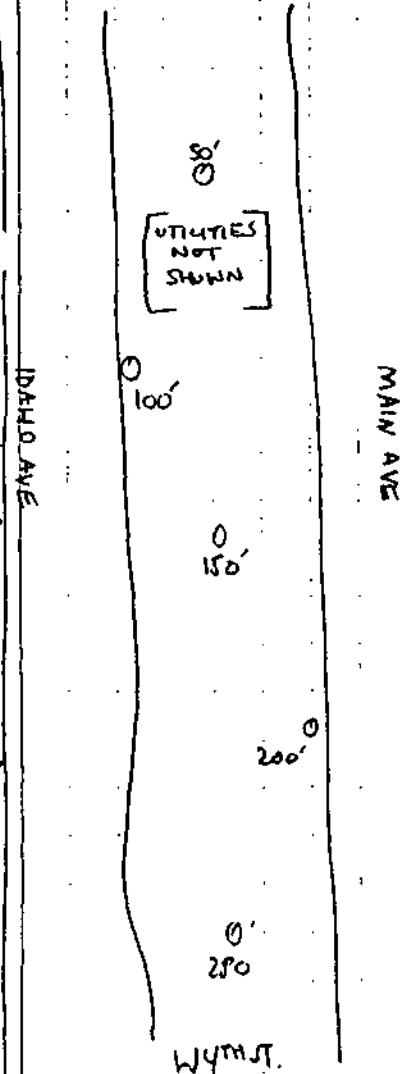
- ① NO VISIBLE VERMICULITE
 ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
 ③ FSDS # CSS-S-006073
 ④ GPS # TZ10163

ADDITIONAL NOTES:

NONE

DAVID SPIELMAN 10-16-03 DSJ

N · W 3RD ST



Location ALLEY #17, ALLEY #18 Date 10-16-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOUPE

DS 10-16-03

15:06

ALLEY #17 (NO SITE SKETCH)

DIMENSIONS: 296 FT X 16 FT

CONSTRUCTION: PAVED

PERIMETER (RESIDENTIAL)

W: APARTMENTS/HOME WITH FENCE/PARKING

E: HOMES/PARKING

NO SAMPLING REQUIRED

NO VERMICULITE OBSERVED IN THE AREA

15:12

ALLEY #18 (NO SITE SKETCH)

DIMENSIONS: 30 M X 16 FT

CONSTRUCTION: PAVED

PERIMETER (RESIDENTIAL & COMMERCIAL)

W: HEDGEROW/HOMES

E: POST OFFICE - PARKING AND BUILDING

NO SAMPLING REQUIRED

NO VERMICULITE OBSERVED IN THE AREA

DAVID SPIELMAN — 10-16-03 — David Spiel

Location ALLEY #19 Date 10-16-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOUPE

DS 10-16-03

15:47 ON-SITE ALLEY #19

DIMENSIONS 30 FT X 12 FT.

CONSTRUCTION PAVED SOIL

W/SMALL ASPHALT PATCH AT THE

NORTH END — 10-16-03

PERIMETER (RESIDENTIAL)

W: HOUSES/YARDS/PARKING

E: HOUSES/YARDS/PARKING

CS- 17363

SP- 124388

① NO VISIBLE VERMICULITE

② SAMPLE EQUIPMENT IS
 DECONTAMINATED AS PER
 SAP — 10-16-03

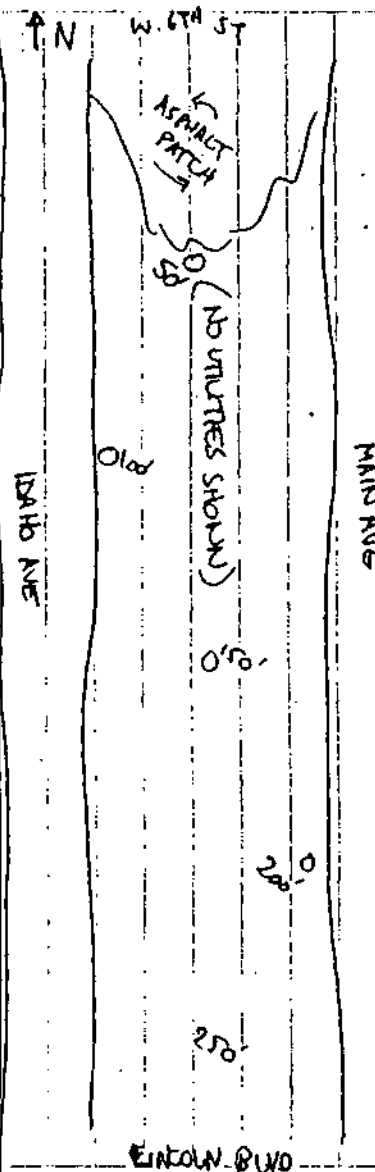
③ FSDS CSS-S-200603

④ GPS # TZ10163

ADDITIONAL NOTES:

NONE

DAVID SPIELMAN — 10-16-03 — David Spiel



Location ALLEY # 127

Date 10.16.03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS 10.16.03

11:16:43: ARRIVE ALLEY #127

DIMENSIONS: 159 FT X 13 FT

CONSTRUCTION: VERY

DEGRADED ASPHALT PAVING
AND PACKED SOIL.PERIMETER (MIXED)
DS 10.16.03

P W: COMMERCIAL/RESIDENCE

F E: COMMERCIAL/RESIDENCE

CS- 17965

SP- 124390

SAMPLE TIME
16:58
MAIN AVE

- ① NO VISIBLE VERMICULITE
② SAMPLE EQUIPMENT IS
DECONTAMINATED AS PER SAP
③ FSDS CS-5-006104
④ GPS # T2L10163

ADDITIONAL NOTES:

ALLEY DEAD-ENDS AT
ALLEY #128

ALLEY #128

ASPHALT

0.50'

0.100'

ASPHALT
(NO SUB SAMPLE)

W 3 RD ST

3. DAVID SPILMAY 10.16.03

Location ALLEY # 128

Date 10.16.03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS 10.16.03

11:02 ON SITE ALLEY #128

DIMENSIONS: 197 FT X 12 FT

CONSTRUCTION: GRAVEL

WITH SOME ASPHALT/TAR

COVERAGE DS 10.16.03

PERIMETER: (MIXED)

N: COMMERCIAL/RESIDENTIAL

E: COMMERCIAL/RESIDENTIAL

CS- 17966

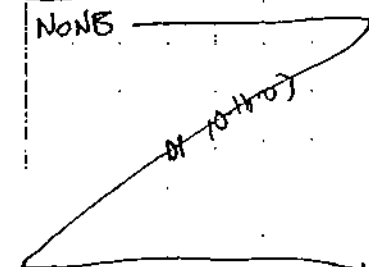
SP- 124391

SAMPLE TIME
17:10
CALIFORNIA AVE

- ① NO VISIBLE VERMICULITE
② SAMPLE EQUIPMENT IS
DECONTAMINATED AS PER SAP
③ FSDS # CS-5-006104
④ GPS # T2L10163

ADDITIONAL NOTES:

NONE



DAVID SPILMAY 10.16.03

N

CORRECT

SWITCH THE PAVED PART
AND SAMPLE START POINT

ERROR

ASPHALT
PAVED

(NO UTILITIES SHOWN)

ALLEY 127

0.100'

ASPHALT
PAVED

50

Location ALLEY #23

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

09:10 ON-SITE ALLEY #23

DIMENSIONS: 278FT x 15FT
278FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL — 05-10-17-03

PERIMETER: (COMMERCIAL)

N: COMMERCIAL

S: COMMERCIAL

SAMPLE TIME

09:40

CS- 17968

SP- 124392

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ PDS# CSS-S-006106
- ④ GPS# T2A10173

ADDITIONAL NOTES:

NONE

DAVID SPIELMAN-10-17-03

MINERAL AVE

N

W 220 FT

ALLEY 24

CALIFORNIA AVE

0 150'

200'

0 150'

0 100'

0 50'

Location ALLEY #24

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

09:43 ON-SITE ALLEY #24

DIMENSIONS: 138FT x 15FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL
AND DEGRADED ASPHALT 05-10-17-03

PERIMETER: (COMMERCIAL)

W: COMMERCIAL BLD.

E: COMMERCIAL BLD.

SAMPLE TIME

09:53

CS- 17969

SP- 124393

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ PDS# CSS-S-006106
- ④ GPS# T2A10173

ADDITIONAL NOTES:

NONE

DAVID SPIELMAN-10-17-03

← ALLEY #23 →

0 50'

0 100'

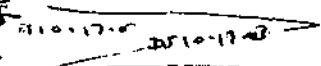
ASPHALT
AND
DEGRADED
ASPHALT

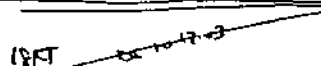
W. 300 FT

52

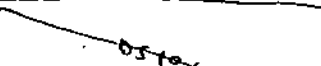
Location ^{DS 10-17-03} ALLEY # ~~23, 24~~ 26, 26, 27 Date 10-17-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

PAVED ALLEYS

09:58 ON-SITE ALLEY # ²⁵ ~~25~~ ^{DS 10-17-03} 
 DIMENSIONS: 288 FT x 19 FT
 CONSTRUCTION: ASPHALT PAVED, FAIR-GOOD CONDITION
 PERIMETER: COMMERCIAL ON EITHER SIDE
 BOUNDARIES: W: CALIFORNIA AVE E: MINERAL AVE
 N: W. 3RD ST S: W. 4TH ST. — DS 10-17-03 —
 NOTES: NO SAMPLING REQUIRED FOR PAVED ALLEYS
 AND NO VERMICULITE WAS OBSERVED IN THE AREA

10:04 ON-SITE ALLEY #26 
 DIMENSIONS: 289 FT x ^{18 FT} ~~18 FT~~ ^{DS 10-17-03}
 CONSTRUCTION: BLACK-TOPI PAVEMENT (ASPHALT) BRAND NEW
 PERIMETER: COMMERCIAL ON EITHER SIDE
 BOUNDARIES: W: CALIFORNIA AVE E: MINERAL AVE
 N: W. 4TH ST S: W. 5TH ST — DS 10-17-03 —

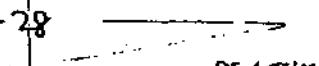
NOTES: NO SAMPLING REQUIRED ON PAVED ALLEYS
 AND NO VERMICULITE WAS OBSERVED IN THE AREA

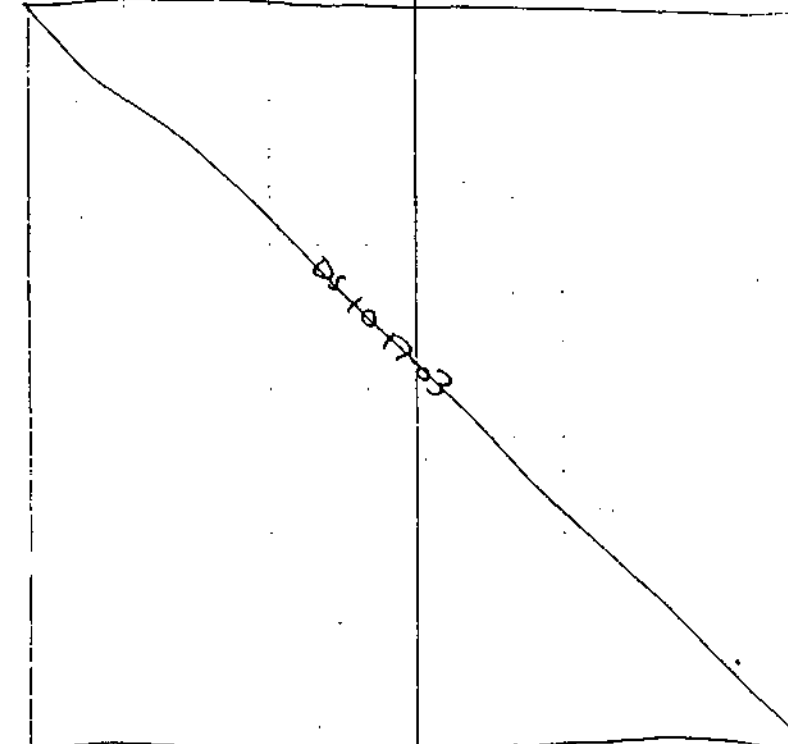
10:12 ON-SITE ALLEY #27 
 DIMENSIONS: 284 FT x 18 FT
 CONSTRUCTION: ASPHALT PAVED-GOOD CONDITION
 PERIMETER: COMMERCIAL ON EITHER SIDE
 BOUNDARIES: W: CALIFORNIA AVE E: MINERAL AVE
 N: W. 5TH ST S: W. 6TH ST.

NOTES: NO SAMPLING REQUIRED IN PAVED ALLEYS
 AND NO VERMICULITE WAS OBSERVED IN THE AREA
 DAVID SPIELMAN — 10-17-03 — David Spielman

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Location ALLEY #28 Date 10-17-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

10:18 ON-SITE ALLEY #28 
 DIMENSIONS: 280 FT x 18 FT ^{DS 10-17-03}
 CONSTRUCTION: ASPHALT PAVED, FAIR CONDITION
 PERIMETER: MOSTLY COMMERCIAL, ONE RESIDENCE
 BOUNDARIES: W: CALIFORNIA AVE E: MINERAL AVE
 N: W. 6TH ST S: LINCOLN BLVD. — DS 10-17-03 —
 NOTES: NO SAMPLING REQUIRED ON PAVED ALLEYS,
 AND NO VISIBLE VERMICULITE IN THE AREA


 DAVID SPIELMAN — 10-17-03 — David Spielman

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Location ALLEY # 29

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~DS 10-17-03~~

10:24: ON-SITE ALLEY # 29

9 N

W. 6TH ST

DIMENSIONS: 283 FT x 15 FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL -- 10-17-03

PERIMETER: (RESIDENTIAL)

W: HOMES/YARDS/DRIVEWAYS

E: HOMES/YARDS/DRIVEWAYS

SAMPLE TIME
10:45

CS- 1797C

SP- 124394

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ FDS# CS-S-006106
- ④ GPST# T2B10173

ADDITIONAL NOTES:

THERE IS A PROPANE TANK BEING RACED AT RESIDENCE IN S.E. END OF ALLEY. VISUAL OF SOIL TRENCH DUG FOR GAS LINE IS ABOUT 8", NO VERMICULITE OBSERVED.

~~DS 10-17-03~~

MAIN AVE

0'100'

0'50'

200'0

0'280'

CALIFORNIA AVE

LINCOLN BLVD

55

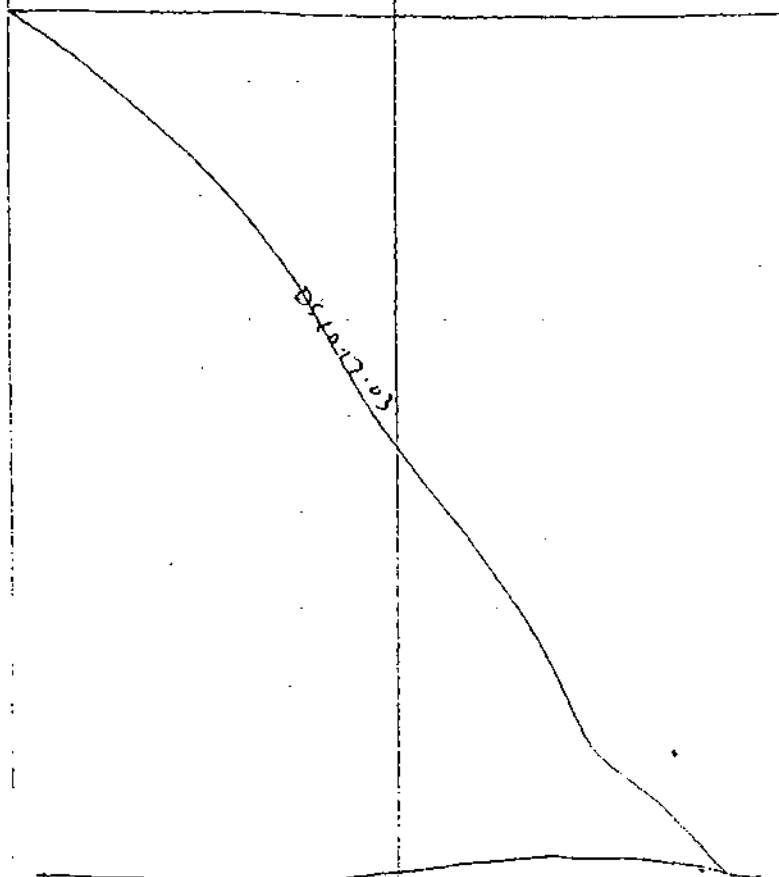
Location ALLEY # 22

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~DS 10-17-03~~10:49 ON SITE ALLEY # 22 -- ~~DS 10-17-03~~

DIMENSIONS - A BUILDING IS ON SITE THERE IS NO ALLEY, A PAVED PARKING LOT IS ALSO ON SITE
BOUNDARIES: BLOCK BORDERED BY MAIN AND CALIFORNIA, W. 5TH AND W. 6TH STREETS. -- 10-17-03



DAVID SPELMAN

10-17-03

David Speelman

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Location ALLEY # 30

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG. 8 VOLPE

DS-10-17-03

10:57 ON SITE ALLEY # 30 ← N MINERAL AVE

CONSTRUCTION: GRAVEL

AND PACKED SOIL

DIMENSIONS: 102 FT x 15 FT

PERIMETER: (COMMERCIAL)

- THIS IS A SHORT DRIVEWAY
NEXT TO THE "MINT" BAR

SAMPLE TIME

11:13

CS- 17971

SP- 124395

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS # CSS-S-006107
- ④ GPS # T2C10173

ADDITIONAL NOTES:

THE EXTENT OF THE ALLEY
IS JUST UP TO THE END OF
BLD. HOUSING "THE MINT" BAR
REMAINDER IS A GRAVEL
PARKING LOT.

DS-10-17-03

DAVID SPIELMAN 10-17-03

0' 100'

0' 50'

PARKING LOT

TO CALIFORNIA AVE

↓

Location ALLEY # 31

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG. 8 VOLPE

DS-10-17-03

11:26 ON SITE ALLEY # 31

DIMENSIONS: 102 FT x 15 FT

CONSTRUCTION: GRAVEL AND

PACKED SOIL — DS-10-17-03

PERIMETER: (COMMERCIAL)

- THIS IS A SHORT DRIVEWAY
USED BY 'ACHIEVEMENTS' LETS
OUT ONTO A GRAVEL PARKING LOT

SAMPLE TIME

11:42

CS- 17972

SP- 124396

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS # CSS-S-006107
- ④ GPS # T2D10173

ADDITIONAL NOTES:

NONE

DS-10-17-03

DAVID SPIELMAN 10-17-03

← N

MONTANA AVE

0' 100'

0' 50'

DS-10-17-03
CALIFORNIA AVE
MINERAL AVE.

58

Location ALLEY #32

Date 10-17-03
10-17-03
16-a
EPA REG 8
VOLPE

Project / Client LIBBY ASBESTOS PROJECT

DS-10-17-03

13:39 ON SITE ALLEY #32

DIMENSIONS: 180 FT x 14 FT

CONSTRUCTION: PAVED SOIL / GRAVEL

PERIMETER: (MIXED)

N: ONE HOME / COMMERCIAL

S: COMMERCIAL BUILDING

SAMPLE TIME

13:51

CS- 17973

SP- 124397

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ FSDS CSS-S-006107
- ④ GPS# T2E10173

ADDITIONAL NOTES:

THIS IS A SHORT DRIVEWAY THAT LETS OUT ON THE EAST SIDE INTO A LARGE GRAVEL PARKING LOT

PARKING LOT

150'

100'

50'

MONTANA AVE

DAVID SPIELMAN 10-17-03 David Spielman

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Location ALLEY #33, #34, #35, #36 Date 10-17-03
Project / Client LIBBY ASBESTOS PROJECT EPA REG 8
VOLPE

DS-10-17-03

13:58 ON SITE ALLEY #33

DIMENSIONS: 288 FT x 15 FT

CONSTRUCTION: ASPHALT PAVED - FAIR TO POOR

CONDITION

PERIMETER COMMERCIAL

BOUNDARIES NORTH: E. 2ND ST.
SOUTH: E. 3RD ST.
WEST: MINERAL
EAST: MONTANA

NOTES: NO SAMPLING REQUIRED ON PAVED ALLEYS, AND NO VISIBLE VERMICULITE IN THE AREA

14:01 ON SITE ALLEY #34

- NORTH/SOUTH MIDLINE OF THE BLOCK (SAME BOUNDARIES AS ALLEY #33) - NO ALLEY HERE
LAND IS USED BY THE BUSINESSES ON THE BLOCK

14:04 ON SITE ALLEY #35

NO ALLEY HERE - IT IS GRASS LAWN, OVERGROWN

14:05 ON SITE ALLEY #36

DIMENSIONS: 305 FT x 18 FT

CONSTRUCTION: ASPHALT PAVED, GOOD CONDITION

PERIMETER: COMMERCIAL

BOUNDARIES NORTH: E. 2ND ST. WEST: MONTANA AVE
SOUTH: E. 3RD ST. EAST: LOUISIANA AVE

DAVID SPIELMAN 10-17-03 David Spielman

Location ALLEY# 37, 38, #39

Date 10-17-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOIRP

DS 10-17-03

14:10 ON SITE ALLEY#37

DIMENSIONS: 283 FT X 18 FT

CONSTRUCTION: ASPHALT/BLACKTOP PAVED, GOOD CONDITION

PERIMETER: COMMERCIAL

BOUNDARIES: NORTH: EAST 3RD ST WEST: MONTANA AVEDS 10-17-03 SOUTH: EAST 4TH ST EAST: LOUISIANA AVENO SAMPLING REQUIRED ON PAVED ALLEY, AND NO
VISIBLE VERMICULITE IN THE AREA DS 10-17-03

14:19 ON SITE ALLEY#38

DIMENSIONS: 280 X 18 FT DS 10-17-03

CONSTRUCTION: ASPHALT PAVED, GOOD CONDITION

PERIMETER: COMMERCIAL

BOUNDARIES: NORTH: EAST 3RD ST WEST: MINERAL AVEDS 10-17-03 SOUTH: EAST 4TH ST EAST: MONTANA AVENO SAMPLING REQUIRED ON PAVED ALLEY, AND NO
VISIBLE VERMICULITE IN THE AREA DS 10-17-03

14:40 ON SITE ALLEY#39

DIMENSIONS: 298 FT X 17 FT

CONSTRUCTION: ASPHALT PAVED, GOOD CONDITION

PERIMETER: MIXED, MOSTLY COMMERCIAL W/ ONE RESIDENCE

BOUNDARIES: NORTH: EAST 4TH ST WEST: MINERAL AVEDS 10-17-03 SOUTH: EAST 5TH ST EAST: MONTANA AVENO SAMPLING REQUIRED ON PAVED ALLEY, AND NO
VISIBLE VERMICULITE IN THE AREA (THERE IS AN ADJACENT
OF SIMILAR ADJACENT DS 10-17-03)

DAVID SPIELMAN - 10-17-03 David Spielman

Location ALLEY#40, #41

Date 10-17-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOIRP

14:49 ON SITE ALLEY#40

DIMENSIONS: 298 FT. X 14 FT.

CONSTRUCTION: ASPHALT PAVED, FAIR CONDITION

PERIMETER: MIXED COMMERCIAL AND RESIDENTIAL

BOUNDARIES NORTH: E 5TH ST ² EAST ³ WEST: MONTANA AVEDS 10-17-03 SOUTH: E 6TH ST ³ EAST: MINERAL AVENO SAMPLING REQUIRED ON PAVED ALLEY, AND NO
VISIBLE VERMICULITE IN THE AREA DS 10-17-03

15:20 ON SITE ALLEY#41

DIMENSIONS: 288 X 18 FT

CONSTRUCTION: ASPHALT PAVED, FAIR CONDITION, PATCHED

PERIMETER: MIXED, MOSTLY COMMERCIAL, ONE HOME

BOUNDARIES: NORTH E 6TH ST WEST MINERAL AVEDS 10-17-03 SOUTH ² ³ ⁴ ⁵ ⁶ ⁷ ⁸ ⁹ ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ ¹⁹ ²⁰ ²¹ ²² ²³ ²⁴ ²⁵ ²⁶ ²⁷ ²⁸ ²⁹ ³⁰ ³¹ ³² ³³ ³⁴ ³⁵ ³⁶ ³⁷ ³⁸ ³⁹ ⁴⁰ ⁴¹ ⁴² ⁴³ ⁴⁴ ⁴⁵ ⁴⁶ ⁴⁷ ⁴⁸ ⁴⁹ ⁵⁰ ⁵¹ ⁵² ⁵³ ⁵⁴ ⁵⁵ ⁵⁶ ⁵⁷ ⁵⁸ ⁵⁹ ⁶⁰ ⁶¹ ⁶² ⁶³ ⁶⁴ ⁶⁵ ⁶⁶ ⁶⁷ ⁶⁸ ⁶⁹ ⁷⁰ ⁷¹ ⁷² ⁷³ ⁷⁴ ⁷⁵ ⁷⁶ ⁷⁷ ⁷⁸ ⁷⁹ ⁸⁰ ⁸¹ ⁸² ⁸³ ⁸⁴ ⁸⁵ ⁸⁶ ⁸⁷ ⁸⁸ ⁸⁹ ⁹⁰ ⁹¹ ⁹² ⁹³ ⁹⁴ ⁹⁵ ⁹⁶ ⁹⁷ ⁹⁸ ⁹⁹ ¹⁰⁰ ¹⁰¹ ¹⁰² ¹⁰³ ¹⁰⁴ ¹⁰⁵ ¹⁰⁶ ¹⁰⁷ ¹⁰⁸ ¹⁰⁹ ¹¹⁰ ¹¹¹ ¹¹² ¹¹³ ¹¹⁴ ¹¹⁵ ¹¹⁶ ¹¹⁷ ¹¹⁸ ¹¹⁹ ¹²⁰ ¹²¹ ¹²² ¹²³ ¹²⁴ ¹²⁵ ¹²⁶ ¹²⁷ ¹²⁸ ¹²⁹ ¹³⁰ ¹³¹ ¹³² ¹³³ ¹³⁴ ¹³⁵ ¹³⁶ ¹³⁷ ¹³⁸ ¹³⁹ ¹⁴⁰ ¹⁴¹ ¹⁴² ¹⁴³ ¹⁴⁴ ¹⁴⁵ ¹⁴⁶ ¹⁴⁷ ¹⁴⁸ ¹⁴⁹ ¹⁵⁰ ¹⁵¹ ¹⁵² ¹⁵³ ¹⁵⁴ ¹⁵⁵ ¹⁵⁶ ¹⁵⁷ ¹⁵⁸ ¹⁵⁹ ¹⁶⁰ ¹⁶¹ ¹⁶² ¹⁶³ ¹⁶⁴ ¹⁶⁵ ¹⁶⁶ ¹⁶⁷ ¹⁶⁸ ¹⁶⁹ ¹⁷⁰ ¹⁷¹ ¹⁷² ¹⁷³ ¹⁷⁴ ¹⁷⁵ ¹⁷⁶ ¹⁷⁷ ¹⁷⁸ ¹⁷⁹ ¹⁸⁰ ¹⁸¹ ¹⁸² ¹⁸³ ¹⁸⁴ ¹⁸⁵ ¹⁸⁶ ¹⁸⁷ ¹⁸⁸ ¹⁸⁹ ¹⁹⁰ ¹⁹¹ ¹⁹² ¹⁹³ ¹⁹⁴ ¹⁹⁵ ¹⁹⁶ ¹⁹⁷ ¹⁹⁸ ¹⁹⁹ ²⁰⁰ ²⁰¹ ²⁰² ²⁰³ ²⁰⁴ ²⁰⁵ ²⁰⁶ ²⁰⁷ ²⁰⁸ ²⁰⁹ ²¹⁰ ²¹¹ ²¹² ²¹³ ²¹⁴ ²¹⁵ ²¹⁶ ²¹⁷ ²¹⁸ ²¹⁹ ²²⁰ ²²¹ ²²² ²²³ ²²⁴ ²²⁵ ²²⁶ ²²⁷ ²²⁸ ²²⁹ ²³⁰ ²³¹ ²³² ²³³ ²³⁴ ²³⁵ ²³⁶ ²³⁷ ²³⁸ ²³⁹ ²⁴⁰ ²⁴¹ ²⁴² ²⁴³ ²⁴⁴ ²⁴⁵ ²⁴⁶ ²⁴⁷ ²⁴⁸ ²⁴⁹ ²⁵⁰ ²⁵¹ ²⁵² ²⁵³ ²⁵⁴ ²⁵⁵ ²⁵⁶ ²⁵⁷ ²⁵⁸ ²⁵⁹ ²⁶⁰ ²⁶¹ ²⁶² ²⁶³ ²⁶⁴ ²⁶⁵ ²⁶⁶ ²⁶⁷ ²⁶⁸ ²⁶⁹ ²⁷⁰ ²⁷¹ ²⁷² ²⁷³ ²⁷⁴ ²⁷⁵ ²⁷⁶ ²⁷⁷ ²⁷⁸ ²⁷⁹ ²⁸⁰ ²⁸¹ ²⁸² ²⁸³ ²⁸⁴ ²⁸⁵ ²⁸⁶ ²⁸⁷ ²⁸⁸ ²⁸⁹ ²⁹⁰ ²⁹¹ ²⁹² ²⁹³ ²⁹⁴ ²⁹⁵ ²⁹⁶ ²⁹⁷ ²⁹⁸ ²⁹⁹ ³⁰⁰ ³⁰¹ ³⁰² ³⁰³ ³⁰⁴ ³⁰⁵ ³⁰⁶ ³⁰⁷ ³⁰⁸ ³⁰⁹ ³¹⁰ ³¹¹ ³¹² ³¹³ ³¹⁴ ³¹⁵ ³¹⁶ ³¹⁷ ³¹⁸ ³¹⁹ ³²⁰ ³²¹ ³²² ³²³ ³²⁴ ³²⁵ ³²⁶ ³²⁷ ³²⁸ ³²⁹ ³³⁰ ³³¹ ³³² ³³³ ³³⁴ ³³⁵ ³³⁶ ³³⁷ ³³⁸ ³³⁹ ³⁴⁰ ³⁴¹ ³⁴² ³⁴³ ³⁴⁴ ³⁴⁵ ³⁴⁶ ³⁴⁷ ³⁴⁸ ³⁴⁹ ³⁵⁰ ³⁵¹ ³⁵² ³⁵³ ³⁵⁴ ³⁵⁵ ³⁵⁶ ³⁵⁷ ³⁵⁸ ³⁵⁹ ³⁶⁰ ³⁶¹ ³⁶² ³⁶³ ³⁶⁴ ³⁶⁵ ³⁶⁶ ³⁶⁷ ³⁶⁸ ³⁶⁹ ³⁷⁰ ³⁷¹ ³⁷² ³⁷³ ³⁷⁴ ³⁷⁵ ³⁷⁶ ³⁷⁷ ³⁷⁸ ³⁷⁹ ³⁸⁰ ³⁸¹ ³⁸² ³⁸³ ³⁸⁴ ³⁸⁵ ³⁸⁶ ³⁸⁷ ³⁸⁸ ³⁸⁹ ³⁹⁰ ³⁹¹ ³⁹² ³⁹³ ³⁹⁴ ³⁹⁵ ³⁹⁶ ³⁹⁷ ³⁹⁸ ³⁹⁹ ⁴⁰⁰ ⁴⁰¹ ⁴⁰² ⁴⁰³ ⁴⁰⁴ ⁴⁰⁵ ⁴⁰⁶ ⁴⁰⁷ ⁴⁰⁸ ⁴⁰⁹ ⁴¹⁰ ⁴¹¹ ⁴¹² ⁴¹³ ⁴¹⁴ ⁴¹⁵ ⁴¹⁶ ⁴¹⁷ ⁴¹⁸ ⁴¹⁹ ⁴²⁰ ⁴²¹ ⁴²² ⁴²³ ⁴²⁴ ⁴²⁵ ⁴²⁶ ⁴²⁷ ⁴²⁸ ⁴²⁹ ⁴³⁰ ⁴³¹ ⁴³² ⁴³³ ⁴³⁴ ⁴³⁵ ⁴³⁶ ⁴³⁷ ⁴³⁸ ⁴³⁹ ⁴⁴⁰ ⁴⁴¹ ⁴⁴² ⁴⁴³ ⁴⁴⁴ ⁴⁴⁵ ⁴⁴⁶ ⁴⁴⁷ ⁴⁴⁸ ⁴⁴⁹ ⁴⁵⁰ ⁴⁵¹ ⁴⁵² ⁴⁵³ ⁴⁵⁴ ⁴⁵⁵ ⁴⁵⁶ ⁴⁵⁷ ⁴⁵⁸ ⁴⁵⁹ ⁴⁶⁰ ⁴⁶¹ ⁴⁶² ⁴⁶³ ⁴⁶⁴ ⁴⁶⁵ ⁴⁶⁶ ⁴⁶⁷ ⁴⁶⁸ ⁴⁶⁹ ⁴⁷⁰ ⁴⁷¹ ⁴⁷² ⁴⁷³ ⁴⁷⁴ ⁴⁷⁵ ⁴⁷⁶ ⁴⁷⁷ ⁴⁷⁸ ⁴⁷⁹ ⁴⁸⁰ ⁴⁸¹ ⁴⁸² ⁴⁸³ ⁴⁸⁴ ⁴⁸⁵ ⁴⁸⁶ ⁴⁸⁷ ⁴⁸⁸ ⁴⁸⁹ ⁴⁹⁰ ⁴⁹¹ ⁴⁹² ⁴⁹³ ⁴⁹⁴ ⁴⁹⁵ ⁴⁹⁶ ⁴⁹⁷ ⁴⁹⁸ ⁴⁹⁹ ⁵⁰⁰ ⁵⁰¹ ⁵⁰² ⁵⁰³ ⁵⁰⁴ ⁵⁰⁵ ⁵⁰⁶ ⁵⁰⁷ ⁵⁰⁸ ⁵⁰⁹ ⁵¹⁰ ⁵¹¹ ⁵¹² ⁵¹³ ⁵¹⁴ ⁵¹⁵ ⁵¹⁶ ⁵¹⁷ ⁵¹⁸ ⁵¹⁹ ⁵²⁰ ⁵²¹ ⁵²² ⁵²³ ⁵²⁴ ⁵²⁵ ⁵²⁶ ⁵²⁷ ⁵²⁸ ⁵²⁹ ⁵³⁰ ⁵³¹ ⁵³² ⁵³³ ⁵³⁴ ⁵³⁵ ⁵³⁶ ⁵³⁷ ⁵³⁸ ⁵³⁹ ⁵⁴⁰ ⁵⁴¹ ⁵⁴² ⁵⁴³ ⁵⁴⁴ ⁵⁴⁵ ⁵⁴⁶ ⁵⁴⁷ ⁵⁴⁸ ⁵⁴⁹ ⁵⁵⁰ ⁵⁵¹ ⁵⁵² ⁵⁵³ ⁵⁵⁴ ⁵⁵⁵ ⁵⁵⁶ ⁵⁵⁷ ⁵⁵⁸ ⁵⁵⁹ ⁵⁶⁰ ⁵⁶¹ ⁵⁶² ⁵⁶³ ⁵⁶⁴ ⁵⁶⁵ ⁵⁶⁶ ⁵⁶⁷ ⁵⁶⁸ ⁵⁶⁹ ⁵⁷⁰ ⁵⁷¹ ⁵⁷² ⁵⁷³ ⁵⁷⁴ ⁵⁷⁵ ⁵⁷⁶ ⁵⁷⁷ ⁵⁷⁸ ⁵⁷⁹ ⁵⁸⁰ ⁵⁸¹ ⁵⁸² ⁵⁸³ ⁵⁸⁴ ⁵⁸⁵ ⁵⁸⁶ ⁵⁸⁷ ⁵⁸⁸ ⁵⁸⁹ ⁵⁹⁰ ⁵⁹¹ ⁵⁹² ⁵⁹³ ⁵⁹⁴ ⁵⁹⁵ ⁵⁹⁶ ⁵⁹⁷ ⁵⁹⁸ ⁵⁹⁹ ⁶⁰⁰ ⁶⁰¹ ⁶⁰² ⁶⁰³ ⁶⁰⁴ ⁶⁰⁵ ⁶⁰⁶ ⁶⁰⁷ ⁶⁰⁸ ⁶⁰⁹ ⁶¹⁰ ⁶¹¹ ⁶¹² ⁶¹³ ⁶¹⁴ ⁶¹⁵ ⁶¹⁶ ⁶¹⁷ ⁶¹⁸ ⁶¹⁹ ⁶²⁰ ⁶²¹ ⁶²² ⁶²³ ⁶²⁴ ⁶²⁵ ⁶²⁶ ⁶²⁷ ⁶²⁸ ⁶²⁹ ⁶³⁰ ⁶³¹ ⁶³² ⁶³³ ⁶³⁴ ⁶³⁵ ⁶³⁶ ⁶³⁷ ⁶³⁸ ⁶³⁹ ⁶⁴⁰ ⁶⁴¹ ⁶⁴² ⁶⁴³ ⁶⁴⁴ ⁶⁴⁵ ⁶⁴⁶ ⁶⁴⁷ ⁶⁴⁸ ⁶⁴⁹ ⁶⁵⁰ ⁶⁵¹ ⁶⁵² ⁶⁵³ ⁶⁵⁴ ⁶⁵⁵ ⁶⁵⁶ ⁶⁵⁷ ⁶⁵⁸ ⁶⁵⁹ ⁶⁶⁰ ⁶⁶¹ ⁶⁶² ⁶⁶³ ⁶⁶⁴ ⁶⁶⁵ ⁶⁶⁶ ⁶⁶⁷ ⁶⁶⁸ ⁶⁶⁹ ⁶⁷⁰ ⁶⁷¹ ⁶⁷² ⁶⁷³ ⁶⁷⁴ ⁶⁷⁵ ⁶⁷⁶ ⁶⁷⁷ ⁶⁷⁸ ⁶⁷⁹ ⁶⁸⁰ ⁶⁸¹ ⁶⁸² ⁶⁸³ ⁶⁸⁴ ⁶⁸⁵ ⁶⁸⁶ ⁶⁸⁷ ⁶⁸⁸ ⁶⁸⁹ ⁶⁹⁰ ⁶⁹¹ ⁶⁹² ⁶⁹³ ⁶⁹⁴ ⁶⁹⁵ ⁶⁹⁶ ⁶⁹⁷ ⁶⁹⁸ ⁶⁹⁹ ⁷⁰⁰ ⁷⁰¹ ⁷⁰² ⁷⁰³ ⁷⁰⁴ ⁷⁰⁵ ⁷⁰⁶ ⁷⁰⁷ ⁷⁰⁸ ⁷⁰⁹ ⁷¹⁰ ⁷¹¹ ⁷¹² ⁷¹³ ⁷¹⁴ ⁷¹⁵ ⁷¹⁶ ⁷¹⁷ ⁷¹⁸ ⁷¹⁹ ⁷²⁰ ⁷²¹ ⁷²² ⁷²³ ⁷²⁴ ⁷²⁵ ⁷²⁶ ⁷²⁷ ⁷²⁸ ⁷²⁹ ⁷³⁰ ⁷³¹ ⁷³² ⁷³³ ⁷³⁴ ⁷³⁵ ⁷³⁶ ⁷³⁷ ⁷³⁸ ⁷³⁹ ⁷⁴⁰ ⁷⁴¹ ⁷⁴² ⁷⁴³ ⁷⁴⁴ ⁷⁴⁵ ⁷⁴⁶ ⁷⁴⁷ ⁷⁴⁸ ⁷⁴⁹ ⁷⁵⁰ ⁷⁵¹ ⁷⁵² ⁷⁵³ ⁷⁵⁴ ⁷⁵⁵ ⁷⁵⁶ ⁷⁵⁷ ⁷⁵⁸ ⁷⁵⁹ ⁷⁶⁰ ⁷⁶¹ ⁷⁶² ⁷⁶³ ⁷⁶⁴ ⁷⁶⁵ ⁷⁶⁶ ⁷⁶⁷ ⁷⁶⁸ ⁷⁶⁹ ⁷⁷⁰ ⁷⁷¹ ⁷⁷² ⁷⁷³ ⁷⁷⁴ ⁷⁷⁵ ⁷⁷⁶ ⁷⁷⁷ ⁷⁷⁸ ⁷⁷⁹ ⁷⁸⁰ ⁷⁸¹ ⁷⁸² ⁷⁸³ ⁷⁸⁴ ⁷⁸⁵ ⁷⁸⁶ ⁷⁸⁷ ⁷⁸⁸ ⁷⁸⁹ ⁷⁹⁰ ⁷⁹¹ ⁷⁹² ⁷⁹³ ⁷⁹⁴ ⁷⁹⁵ ⁷⁹⁶ ⁷⁹⁷ ⁷⁹⁸ ⁷⁹⁹ ⁸⁰⁰ ⁸⁰¹ ⁸⁰² ⁸⁰³ ⁸⁰⁴ ⁸⁰⁵ ⁸⁰⁶ ⁸⁰⁷ ⁸⁰⁸ ⁸⁰⁹ ⁸¹⁰ ⁸¹¹ ⁸¹² ⁸¹³ ⁸¹⁴ ⁸¹⁵ ⁸¹⁶ ⁸¹⁷ ⁸¹⁸ ⁸¹⁹ ⁸²⁰ ⁸²¹ ⁸²² ⁸²³ ⁸²⁴ ⁸²⁵ ⁸²⁶ ⁸²⁷ ⁸²⁸ ⁸²⁹ ⁸³⁰ ⁸³¹ ⁸³² ⁸³³ ⁸³⁴ ⁸³⁵ ⁸³⁶ ⁸³⁷ ⁸³⁸ ⁸³⁹ ⁸⁴⁰ ⁸⁴¹ ⁸⁴² ⁸⁴³ ⁸⁴⁴ ⁸⁴⁵ ⁸⁴⁶ ⁸⁴⁷ ⁸⁴⁸ ⁸⁴⁹ ⁸⁵⁰ ⁸⁵¹ ⁸⁵² ⁸⁵³ ⁸⁵⁴ ⁸⁵⁵ ⁸⁵⁶ ⁸⁵⁷ ⁸⁵⁸ ⁸⁵⁹ ⁸⁶⁰ ⁸⁶¹ ⁸⁶² ⁸⁶³ ⁸⁶⁴ ⁸⁶⁵ ⁸⁶⁶ ⁸⁶⁷ ⁸⁶⁸ ⁸⁶⁹ ⁸⁷⁰ ⁸⁷¹ ⁸⁷² ⁸⁷³ ⁸⁷⁴ ⁸⁷⁵ ⁸⁷⁶ ⁸⁷⁷ ⁸⁷⁸ ⁸⁷⁹ ⁸⁸⁰ ⁸⁸¹ ⁸⁸² ⁸⁸³ ⁸⁸⁴ ⁸⁸⁵ ⁸⁸⁶ ⁸⁸⁷ ⁸⁸⁸ ⁸⁸⁹ ⁸⁹⁰ ⁸⁹¹ ⁸⁹² ⁸⁹³ ⁸⁹⁴ ⁸⁹⁵ ⁸⁹⁶ ⁸⁹⁷ ⁸⁹⁸ ⁸⁹⁹ ⁹⁰⁰ ⁹⁰¹ ⁹⁰² ⁹⁰³ ⁹⁰⁴ ⁹⁰⁵ ⁹⁰⁶ ⁹⁰⁷ ⁹⁰⁸ ⁹⁰⁹ ⁹¹⁰ ⁹¹¹ ⁹¹² ⁹¹³ ⁹¹⁴ ⁹¹⁵ ⁹¹⁶ ⁹¹⁷ ⁹¹⁸ ⁹¹⁹ ⁹²⁰ ⁹²¹ ⁹²² ⁹²³ ⁹²⁴ ⁹²⁵ ⁹²⁶ ⁹²⁷ ⁹²⁸ ⁹²⁹ ⁹³⁰ ⁹³¹ ⁹³² ⁹³³ ⁹³⁴ ⁹³⁵ ⁹³⁶ ⁹³⁷ ⁹³⁸ ⁹³⁹ ⁹⁴⁰ ⁹⁴¹ ⁹⁴² ⁹⁴³ ⁹⁴⁴ ⁹⁴⁵ ⁹⁴⁶ ⁹⁴⁷ ⁹⁴⁸ ⁹⁴⁹ ⁹⁵⁰ ⁹⁵¹ ⁹⁵² ⁹⁵³ ⁹⁵⁴ ⁹⁵⁵ ⁹⁵⁶ ⁹⁵⁷ ⁹⁵⁸ ⁹⁵⁹ ⁹⁶⁰ ⁹⁶¹ ⁹⁶² ⁹⁶³ ⁹⁶⁴ ⁹⁶⁵ ⁹⁶⁶ ⁹⁶⁷ ⁹⁶⁸ ⁹⁶⁹ ⁹⁷⁰ ⁹⁷¹ ⁹⁷² ⁹⁷³ ⁹⁷⁴ ⁹⁷⁵ ⁹⁷⁶ ⁹⁷⁷ ⁹⁷⁸ ⁹⁷⁹ ⁹⁸⁰ ⁹⁸¹ ⁹⁸² ⁹⁸³ ⁹⁸⁴ ⁹⁸⁵ ⁹⁸⁶ ⁹⁸⁷ ⁹⁸⁸ ⁹⁸⁹ ⁹⁹⁰ ⁹⁹¹ ⁹⁹² ⁹⁹³ ⁹⁹⁴ ⁹⁹⁵ ⁹⁹⁶ ⁹⁹⁷ ⁹⁹⁸ ⁹⁹⁹ ¹⁰⁰⁰ ¹⁰⁰¹ ¹⁰⁰² ¹⁰⁰³ ¹⁰⁰⁴ ¹⁰⁰⁵ ¹⁰⁰⁶ ¹⁰⁰⁷ ¹⁰⁰⁸ ¹⁰⁰⁹ ¹⁰¹⁰ ¹⁰¹¹ ¹⁰¹² ¹⁰¹³ ¹⁰¹⁴ ¹⁰¹⁵ ¹⁰¹⁶ ¹⁰¹⁷ ¹⁰¹⁸ ¹⁰¹⁹ ¹⁰²⁰ ¹⁰²¹ ¹⁰²² ¹⁰²³ ¹⁰²⁴ ¹⁰²⁵ ¹⁰²⁶ ¹⁰²⁷ ¹⁰²⁸ ¹⁰²⁹ ¹⁰³⁰ ¹⁰³¹ ¹⁰³² ¹⁰³³ ¹⁰³⁴ ¹⁰³⁵ ¹⁰³⁶ ¹⁰³⁷ ¹⁰³⁸ ¹⁰³⁹ ¹⁰⁴⁰ ¹⁰⁴¹ ¹⁰⁴² ¹⁰⁴³ ¹⁰⁴⁴ ¹⁰⁴⁵ ¹⁰⁴⁶ ¹⁰⁴⁷ ¹⁰⁴⁸ ¹⁰⁴⁹ ¹⁰⁵⁰ ¹⁰⁵¹ ¹⁰⁵² ¹⁰⁵³ ¹⁰⁵⁴ ¹⁰⁵⁵ ¹⁰⁵⁶ ¹⁰⁵⁷ ¹⁰⁵⁸ ¹⁰⁵⁹ ¹⁰⁶⁰ ¹⁰⁶¹ ¹⁰⁶² ¹⁰⁶³ ¹⁰⁶⁴ ¹⁰⁶⁵ ¹⁰⁶⁶ ¹⁰⁶⁷ ¹⁰⁶⁸ ¹⁰⁶⁹ ¹⁰⁷⁰ ¹⁰⁷¹ ¹⁰⁷² ¹⁰⁷³ ¹⁰⁷⁴ ¹⁰⁷⁵ ¹⁰⁷⁶ ¹⁰⁷⁷ ¹⁰⁷⁸ ¹⁰⁷⁹ ¹⁰⁸⁰ ¹⁰⁸¹ ¹⁰⁸² ¹⁰⁸³ ¹⁰⁸⁴ ¹⁰⁸⁵ ¹⁰⁸⁶ ¹⁰⁸⁷ ¹⁰⁸⁸ ¹⁰⁸⁹ ¹⁰⁹⁰ ¹⁰⁹¹ ¹⁰⁹² ¹⁰⁹³ ¹⁰⁹⁴ ¹⁰⁹⁵ ¹⁰⁹⁶ ¹⁰⁹⁷ ¹⁰⁹⁸ ¹⁰⁹⁹ ¹¹⁰⁰ ¹¹⁰¹ ¹¹⁰² ¹¹⁰³ ¹¹⁰⁴ ¹¹⁰⁵ ¹¹⁰⁶ ¹¹⁰⁷ ¹¹⁰⁸ ¹¹⁰⁹ ¹¹¹⁰ ¹¹¹¹ ¹¹¹² ¹¹¹³ ¹¹¹⁴ ¹¹¹⁵ ¹¹¹⁶ ¹¹¹⁷ ¹¹¹⁸ ¹¹¹⁹ ¹¹²⁰ ¹¹²¹ ¹¹²² ¹¹²³ ¹¹²⁴ ¹¹²⁵ ¹¹²⁶ ¹¹²⁷ ¹¹²⁸ ¹¹²⁹ ¹¹³⁰ ¹¹³¹ ¹¹³² ¹¹³³ ¹¹³⁴ ¹¹³⁵ ¹¹³⁶ ¹¹³⁷ ¹¹³⁸ ¹¹³⁹ ^{1140</}

6102

Location ALLEY #42

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT

EPA REG-8
VOLPE

DS-10-17-03

15:30 ON SITE ALLEY #42

CONSTRUCTION: DECOMPOSED
ASPHALT PAVING (SOFT AND
HAS APPEARANCE OF GRAVEL
AND PACKED BLACK SOIL)
PERIMETER: (RESIDENTIAL)
HOMES/YARDS/DRIVEWAYS/SHEDS

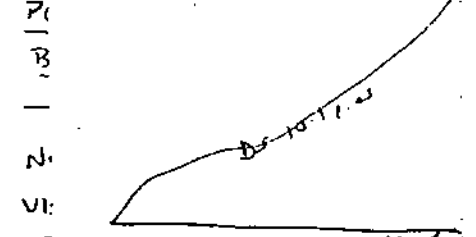
SAMPLE TIME
15:47
CS- 17974
SP- 124398

- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006108
- ④ GPS# T26 T2F10173

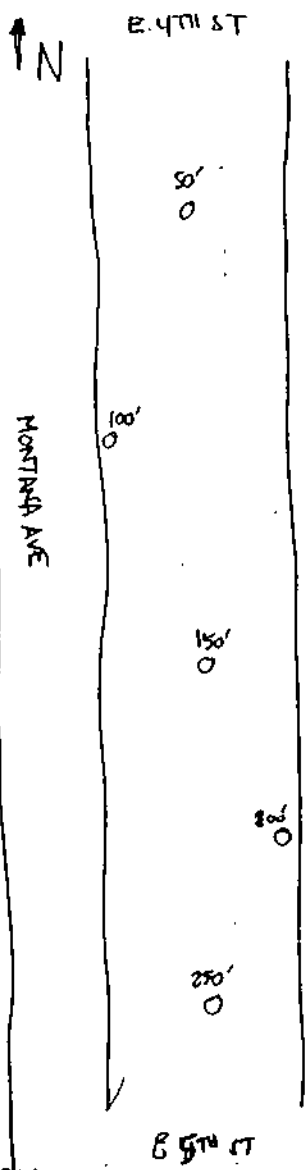
ADDITIONAL NOTES:

DIMENSIONS 300 FT. X 15 FT

NO ADDITIONAL NOTES



DAVID SPIELMAN 10-17-03



Location ALLEY #43

Date 10-17-03

Project/Client LIBBY ASBESTOS PROJECT

EPA REG-8
VOLPE

DS-10-17-03

16:30 ON SITE ALLEY #43

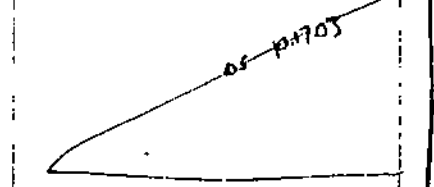
CONSTRUCTION: GRAVEL
AND PACKED SOIL. APPEARS
TO HAVE HAD ASPHALT AT
ONE TIME (OBSERVED AT
EDGES OF ALLEY)
PERIMETER: (RESIDENTIAL)
HOMES/YARDS/SHEDS/DRIVEWAYS

SAMPLE TIME
16:50
CS- 17975
SP 124399

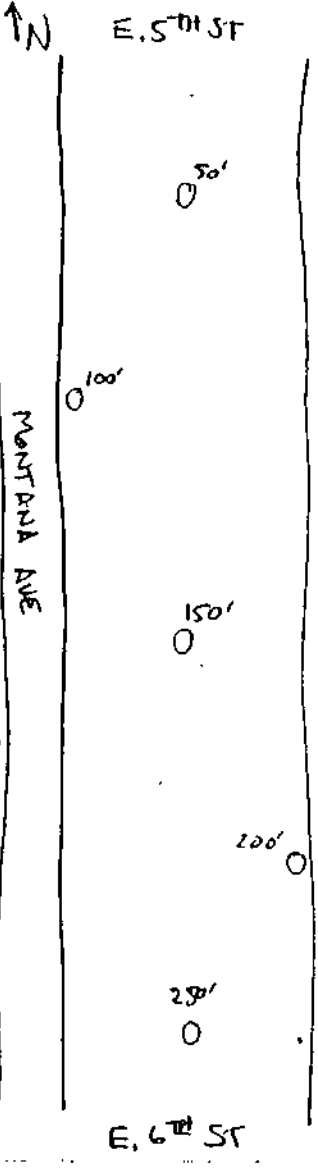
- ① NO VISIBLE VERMICULITE
- ② SAMPLE EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006108
- ④ GPS# T26 T2F10173

ADDITIONAL NOTES:

NONE



DAVID SPIELMAN 10-17-03



ALLEY # 44

10.17.03

LIGBY ASBESTOS PROJECT

EPA REG 8
VOLTE

~~DS-10-17-03~~

16:55 ON SITE ALLEY # 44

DIMENSIONS: 294 FT. X 16 FT.

CONSTRUCTION: EXTREMELY

DEGRADED ASPHALT PAVING,

NOW MOSTLY GRAVEL AND SOFT

ASPHALT/SOIL MIX. ~~DS-10-17-03~~

PERIMETER: (RESIDENTIAL)

HOUSES/YARDS/SHEDS/DRIVEWAYS

SAMPLE TIME
17:10

CS- 17976

JP- 124407

~~DS-10-17-03~~

① NO VISIBLE VERMICULITE

② SAMPLE EQUIPMENT IS

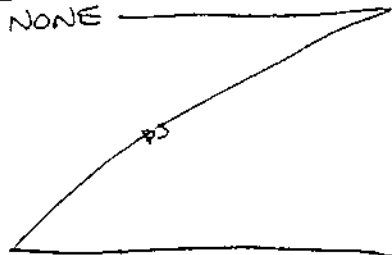
DECONTAMINATED AS PER SAP

③ FDS# CSS-S-006108

④ GPS# T2H10173

ADDITIONAL NOTES:

NONE



E 6TH ST

↑ N

050'

100'

150'

200'

250'

MONTANA AVE

LOUISIANA AVE

LINCOLN BLVD

DAVID RICHMAN - 10.17.03 David Richman

Location 10-18-03 Alley #45 Date 10-18-03 67
Project / Client LIBBY ASBESTOS PROJECT EPARC-8
YOLPE

~~05-10-19-03~~

0950 ON SITE Alley #45

~~05-10-18-03~~

DIMENSIONS 297 x 20 FT

CONSTRUCTION : NORTH HALF IS BLACK TOP PAVED,
SOUTH HALF IS DEGRADED ASPHALT IN FAIR TO POOR
CONDITION

~~10-18-03~~

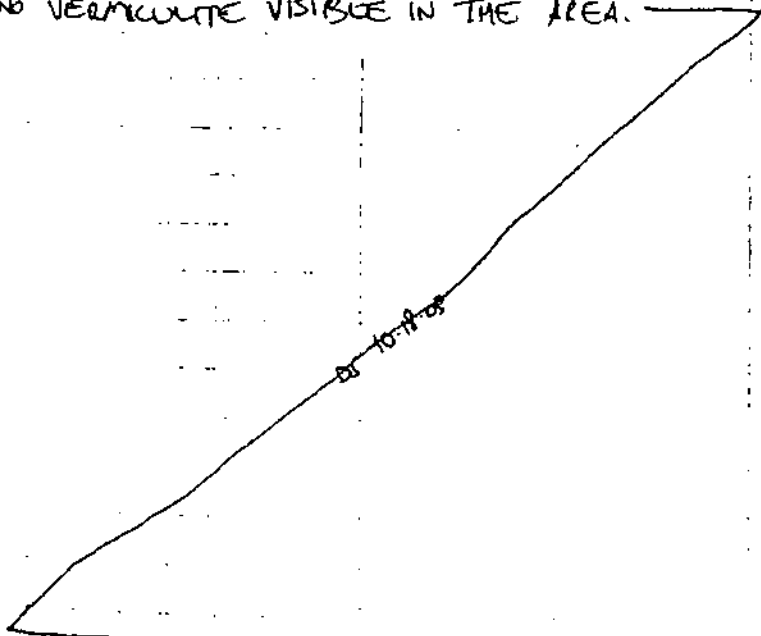
PERMETER : (MIXED) NORTH HALF IS COMMERCIAL
PARKING, SOUTH HALF IS RESIDENTIAL

~~05-10-18-03~~

BOUNDARIES NORTH E. 4TH ST WEST LOUISIANA AVE

~~10-18-03~~ SOUTH E. 5TH ST EAST UTAH AVE

NO SAMPLING REQUIRED IN PAVED AREAS AND
NO VERMICULITE VISIBLE IN THE AREA.



DAVID SPELMAN - 10-18-03 - David Spelman

Location ALLEY #46

Date 10-18-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

ON SITE 10:00 ALLEY #46
 DIMENSIONS 305 FT. X 18 FT.
 CONSTRUCTION: PACKED SOIL
 AND GRAVEL, EXTERIOR REMNANTS
 OF (FORMER) ASPHALT PAVING
 PERIMETER: (RESIDENTIAL)
 YARDS/HOMES/SHEDS/DRIVEWAYS

SAMPLE TIME
 10:21

CS- 17978

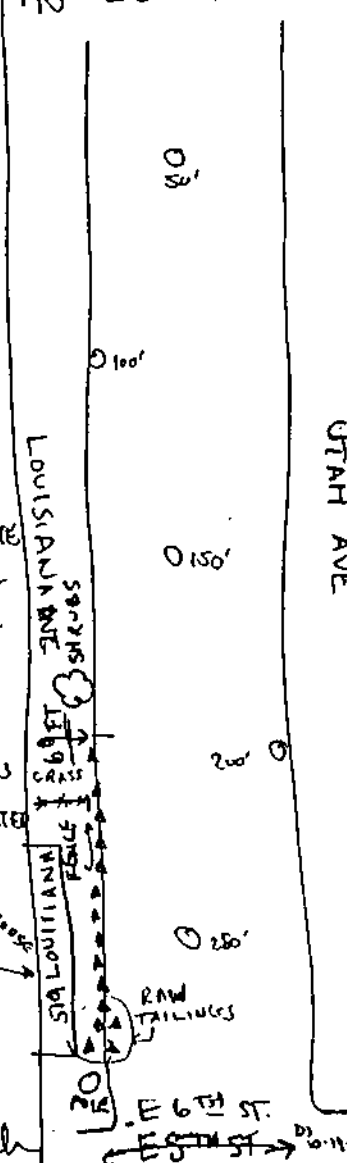
SP- 124401

- ① SIGNIFICANT VISIBLE VERMICULITE
 LOCATED AT ~~6 FT.~~ ^{FROM S.W.} ~~TO END~~, SOIL
 BERM ALONG THE S.W. SIDE OF
 ALLEY - APPEARS TO CONTAIN AT
 LEAST ONE LARGE PACKET OF RAW
 (UNPROCESSED) TAILINGS — DS-10-18-03
- ② SAMPLING EQUIPMENT DECONTAMINATED
 ACCORDING TO THE SAP
- ③ FSDS# CS-S-006110
- ④ GPS# TZA10183

DS-10-18-03

DAVID SPIELMAN - 10-18-03

E 4TH ST DS-10-18-03
 E 5TH ST



Location ALLEY #47

Date 10-18-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

10:49 ON SITE ALLEY #47
 DIMENSIONS 295 FT. X 12 FT.
 CONSTRUCTION PACKED SOIL
 AND GRAVEL, DEGRADED
 ASPHALT PAVEMENT
 PERIMETER (RESIDENTIAL)
 YARDS/HOMES/SHEDS/DRIVEWAYS

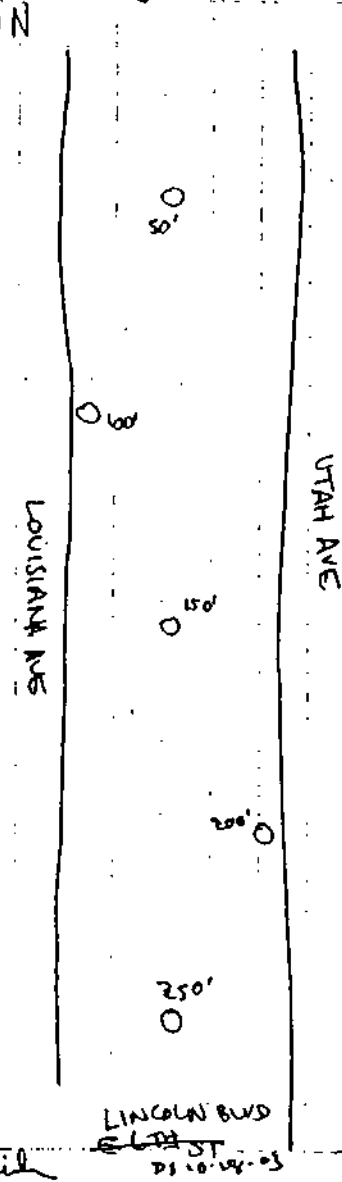
SAMPLE TIME
 10:11

CS- 17979

SP- 124402

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
 DECONTAMINATED AS PER SAP
- ③ FSDS# CS-S-006110
- ④ GPS# ~~TZA10183~~ ^{DS-10-18-03} T2B0183
- ADDITIONAL NOTES: NONE

E 6TH ST



LINCOLN BVD
 E 6TH ST
 DS-10-18-03

DAVID SPIELMAN - 10-18-03

Location **Alley #48** Date **10-18-03**
 Project/Client **LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE**

~~10-18-03~~

11:12 ON SITE ALLEY #48

DIMENSIONS: 301 FT x 18 FT

CONSTRUCTION: PACKED SOIL
 AND GRAVEL ~~DS 10-18-03~~

PERIMETER: (RESIDENTIAL)

HOUSES / YARDS / SIDES / DRIVEWAYS

SAMPLE TIME
 11:28

CS- 17980

SP- 124403

① SMALL QTY VISIBLE
 VERMICULITE IN S.W. END,
 A SMALL PATCH NEXT TO
 FENCE POST, 33 FT FROM SW.
 CORNER OF ALLEY. ~~DS 10-18-03~~

② SAMPLING EQUIPMENT IS
 DECONTAMINATED AS PER SAP

③ FSDS # CSS-S-006110

④ GPS # TZC10183

ADDITIONAL NOTES: NONE

↑ N E 3RD ST

UTAH AVE

DAKOTA AVE

E 4TH ST

DAVID SIEGELMAN - 10-18-03 *David Siegelman*

Location **Alley #49**

Date **10-18-03**
 Project/Client **LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE**

~~10-18-03~~

13:27 ON SITE ALLEY #49

DIMENSIONS 295 FT x 15 FT

CONSTRUCTION NATURAL
 SOIL AND GRAVEL LARGE ~~DS 10-18-03~~

STREAM ROCKS ~~DS 10-18-03~~

PERIMETER (RESIDENTIAL)

OPEN (NO FENCE) LAWNS,
 HOMES / DRIVEWAYS / SIDES

SAMPLE TIME
 13:41

CS- 17981

SP- 124404

① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT IS

DECONTAMINATED AS PER SAP

③ FSDS # CSS-S-006011 ~~DS 10-18-03~~

④ GPS # TZD10183

ADDITIONAL NOTES: NONE

ALLEYWAY TO

MINNESOTA AVE

EAST 3RD ST

EAST 4TH ST

DAKOTA AVE

DAVID SIEGELMAN - 10-18-03 *David Siegelman*

E 3RD ST
~~DS 10-18-03~~

Location ALLEY #50

Date 10-18-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

13:50 ON SITE ALLEY #50

CONSTRUCTION: PACKED

SOIL AND GRAVEL — DS-10-18-03

DIMENSIONS 297FT X 13FT

PERIMETER (RESIDENTIAL)

HOMES/YARDS/SHEDS/FENCE

SAMPLE TIME
14:09

CS- 17982

SP- 124405

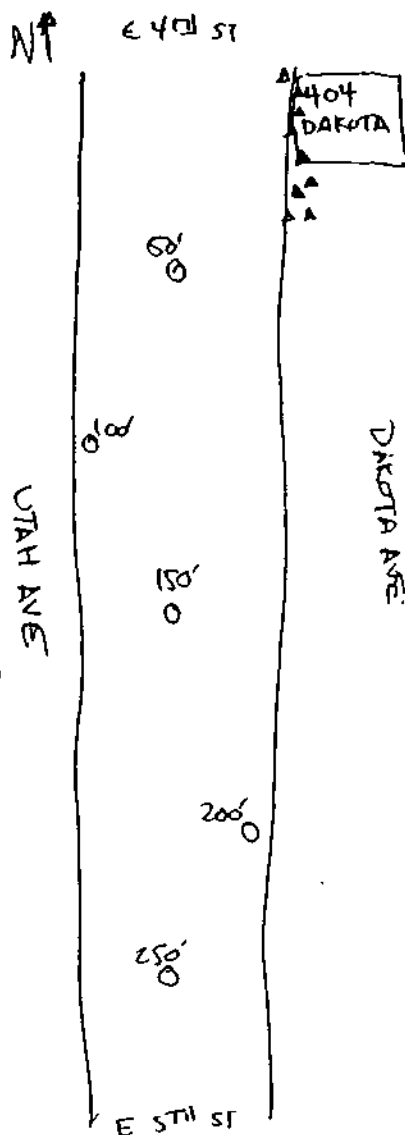
① VISIBLE VERMICULITE WAS OBSERVED, SIGNIFICANT "HIGH" AMOUNT, AT N.E. CORNER OF ALLEY IN SOIL ASSOCIATED (GARDEN ALSO FULL OF VERMIC.) WITH BACKYARD AND GARDEN OF 404 DAKOTA AVE.

② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP

③ FSDS CSS-S-006111

ADDITIONAL NOTES: NO

FENCE BETWEEN 404 DAKOTA BACKYARD AND THE ALLEY — DS-10-18-03



DAVID SPIELMAN — 10-18-03 — David Spielman

Location ALLEY #51

Date 10-18-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

14:13 ON SITE ALLEY #51

DIMENSIONS: 306FT X 13FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL — DS-10-18-03

PERIMETER: (RESIDENTIAL)

YARDS/DRIVEWAYS/SHEDS/HOUSES

SAMPLE TIME
02:41

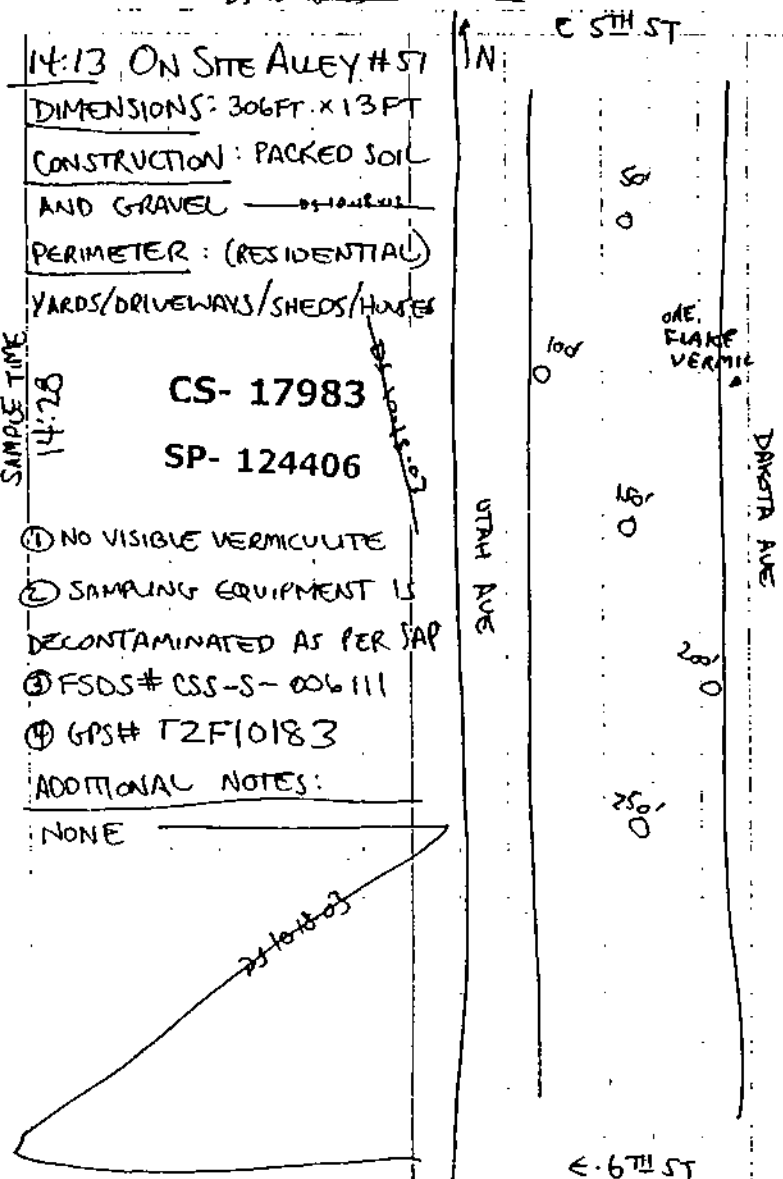
CS- 17983

SP- 124406

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006111
- ④ GPS# T2F10183

ADDITIONAL NOTES:

NONE



DAVID SPIELMAN — 10-18-03 — David Spielman

Location ALEY #52

Date 10-18-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

DS 10-18-03

-14:32-14:32 ARRIVE ALEY #52

DIMENSIONS: 293 FT. X 14 FT.

CONSTRUCTIONS: PACKED
SOIL AND GRAVEL — DS-10-18-03PERIMETER (RESIDENTIAL)
YARDS / FENCE / HOMES / DRIVEWAYS

SAMPLE TIME

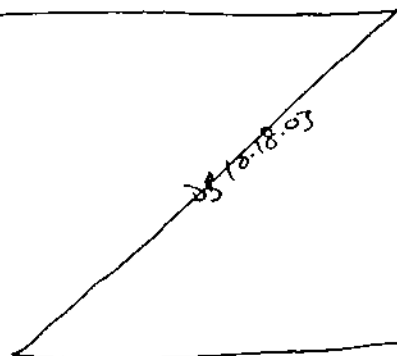
9:45
14:14

CS- 17985

SP- 124407

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006112
- ④ GPS# TZG10183

ADDITIONAL NOTES: NONE



DAVID SPIELMAN 10.18.03 — David Spielman

LINCOLN BLVD

E 6TH ST

50'

100'

150'

200'

250'

DAKOTA AVE

UTAH AVE

Location ALEY #53

Date 10-18-03 75

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-18-03

1456 ON SITE ALEY #53

DIMENSIONS 293 FT. X 14 FT.

CONSTRUCTION PACKED SOIL
AND GRAVEL — DS-10-18-03PERIMETER (RESIDENTIAL)
HOMES / SHEDS / YARDS / FENCES /
DRIVEWAY — DS-10-18-03

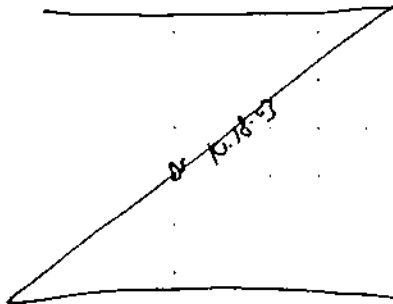
SAMPLE TIME

CS- 17984

SP- 124408

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS# CS-S-06112
- ④ GPS# TZG10183

ADDITIONAL NOTES: NONE



DAVID SPIELMAN 10.18.03 — David Spielman

E 5TH ST

250'

200'

150'

100'

50'

MINNESOTA AVE

DAKOTA AVE

E 4TH ST

78

Location

ALLEY #54 SS

Date: 10-20-03

Project/Client

LIBBY ASBESTOS PROJECT EPA REG
VOLPE

DS 10-20-03

0900: ALLEY #54 ON SITE

DIMENSIONS: 298 FT x 16 FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL
PERIMETER: (RESIDENTIAL)

YARDS/SILOS/HOUSES/DRIVEWAY

SAMPLE TIME

09:23

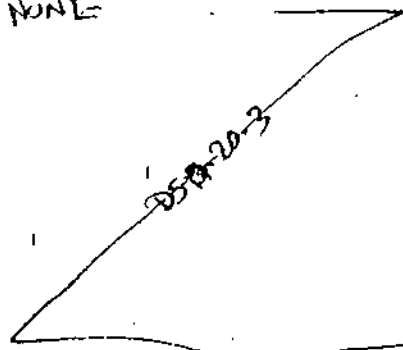
CS- 17987

SP- 124409

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-8-006114
- ④ GPS# T2B10203

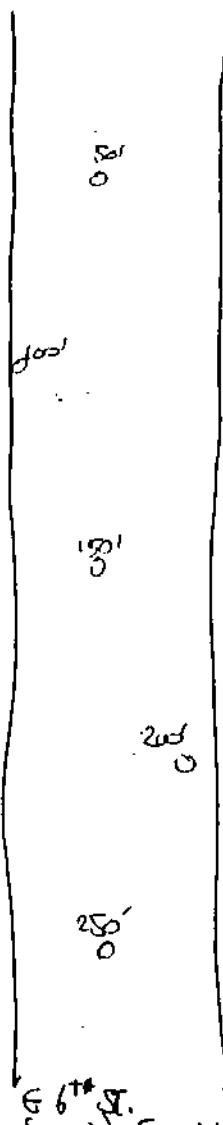
ADDITIONAL NOTES:

NONE



↑ N E 5TH ST.

DAKOTA AVE



MINNESOTA AVE

DS 10-20-03

Location

ALLEY #54 SS

Date: 10-20-03

Project/Client

LIBBY ASBESTOS PROJECT EPA REG
VOLPE

DS 10-20-03

0936: ALLEY #54 ON SITE

DIMENSIONS: 300 FT x 15 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL — DS 10-20-03

PERIMETER (RESIDENTIAL)

YARDS/SILOS/HOUSES/DRIVEWAYS

SAMPLE TIME

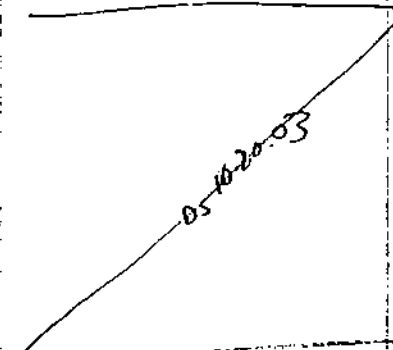
09:36

CS- 17988

SP- 124410

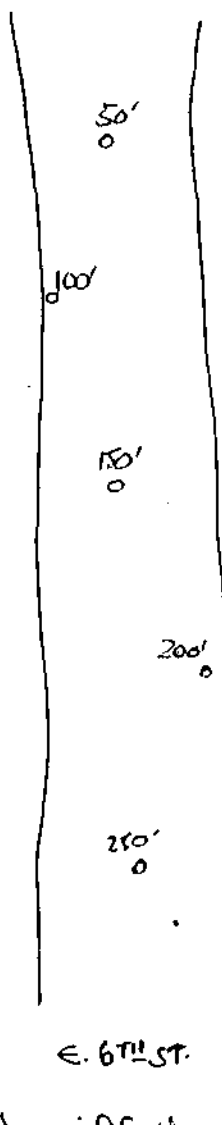
- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-8-006114
- ④ GPS# T2B10203

ADDITIONAL NOTES: NONE



↑ N E 5TH ST.

DAKOTA AVE



MINNESOTA AVE

E 6TH ST.

ALEY # ~~57~~ 56

DS 10.20.03

Date 10.20.03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME

DS 10.20.03

10:00 ON SITE ALEY #56

CONSTRUCTION: PACKED

SOIL AND GRAVEL

DIMENSIONS 264 FT X 18 FT

PERIMETER (RESIDENTIAL)

YARDS/HOMES/DEAD ENDS

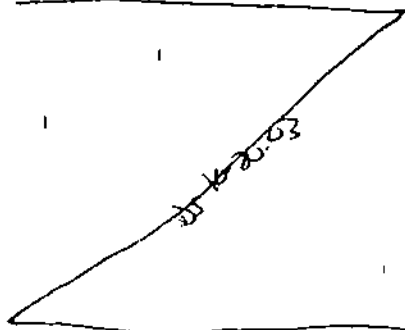
SAMPLE TIME

10:15

CS- 17989

SP- 121411

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
 - ③ FSDS CSS-S-006114
 - ④ GPS# T2C102003
T2C10203
- ADDITIONAL NOTES:



MINNESOTA AVE

E 5TH ST.

100

200

200

RAILROAD TRACKS
RESIDENTIAL (NO STREET)

WISCONSIN AVE
(NO STREET RESIDENTIAL)

DAVID SPIELMAN — 10.20.03 — David Spiel

ALEY # 57

Date 10.20.03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME

DS 10.20.03

10:20 ON SITE ALEY #57

DIMENSIONS: 302 FT X 18 FT

PERIMETER: (RESIDENTIAL)

YARDS/DRIVEWAYS/HOMES/SHEDS

CONSTRUCTION: ASPHALT

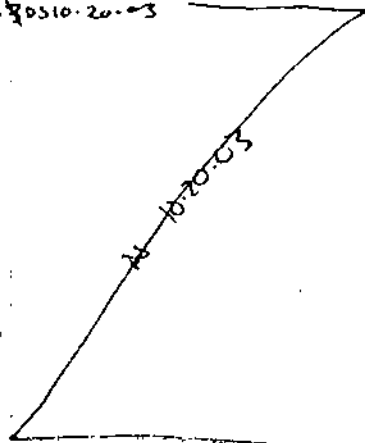
PAVED, VERY POOR CONDITION

- ABOUT 80% REMAINING

SAMPLE TIME

10:20.03

- ① NO VISIBLE VERMICULITE
 - ② NO SAMPLING REQUIRED ON PAVED DRIVEWAYS
- 10.20.03 DS



MINNESOTA AVE

E 6TH ST

E 5TH ST

DEGRADED
TO GRAVEL

PAVED
DEGRADED
TO GRAVEL

DAVID SPIELMAN — 10.20.03 — David Spiel

82

ALLEY #58

10-20-03

LIBBY ASBESTOS PROJECT EPA REG-8

VARG

DS 10-20-03

10:38 ON SITE ALLEY #58

DIMENSIONS: 27 FT X 18 FT

CONSTRUCTION: ASPHALT PAVED

AND GRAVEL — DS 10-20-03

VERY POOR CONDITION

PERIMETER (RESIDENTIAL)

DS 10-20-03

YARDS/SHEDS/HOMES/DRIVEWAYS

① TRACE VISIBLE VERMICULITE

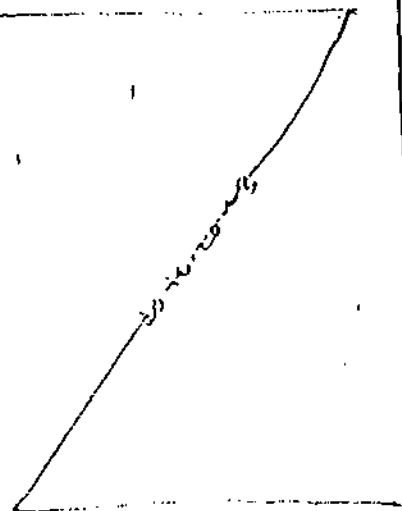
ADVANCED TO THE (ON) THE

E. 6TH ST, NOW IN ALLEY

② NO SAMPLING REQUIRED

ON PAVED ALLEY WAY

ADDITIONAL NOTES: NONE



DAVID SPIELMAN — 10-20-03 — David Spiel

E 5TH ST

MINNESOTA AVE

RESIDENTIAL (NO STREET)

714
E 6TH

E. 6TH ST

ALLEY #59

10-20-03

LIBBY ASBESTOS PROJECT EPA REG-8

VARG

DS 10-20-03

10:50 ON SITE ALLEY #59

DIMENSIONS 29 FT X 14 FT

CONSTRUCTION: PACKED SAND

AND GRAVEL — DS 10-20-03

PERIMETER (RESIDENTIAL)

YARDS/HOMES/SHEDS/DRIVEWAYS

CS-17990

SP-124412

DS 10-20-03

① "MEDIUM" VISIBLE

VERMICULITE IN A PATCH THAT

IS NEXT TO A GARDEN, 619

MINNESOTA AVE BACK YARD

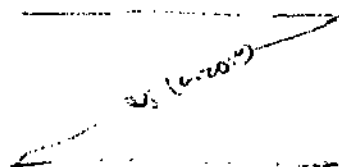
② SAMPLING EQUIPMENT IS

DECONTAMINATED AS PER SAP

③ FSDS# CS-8-006115

④ GRS# T210203

ADDITIONAL NOTES: NONE



DAVID SPIELMAN — 10-20-03 — David Spiel

E 6TH ST

N

MINNESOTA AVE

MINNESOTA AVE

60'

105'

156'

200'

250'

LINCOLN BLVD.

619
MINNESOTA

Location ALLEY #60 Date 10.20.03 85
Project / Client: LIBBY ASBESTOS PROJECT EPA REG-8
VOURE
DS 10 20 03

13:50 ON SITE ALLEY #60
RAINING (MODERATE)
DIMENSIONS 299 FT X 14 FT
CONSTRUCTION PACKED SOIL
AND GRAVEL ~~DS 10 20 03~~
PERIMETER (RESIDENTIAL)
YARDS / DRIVEWAYS / HOMES / STEPS

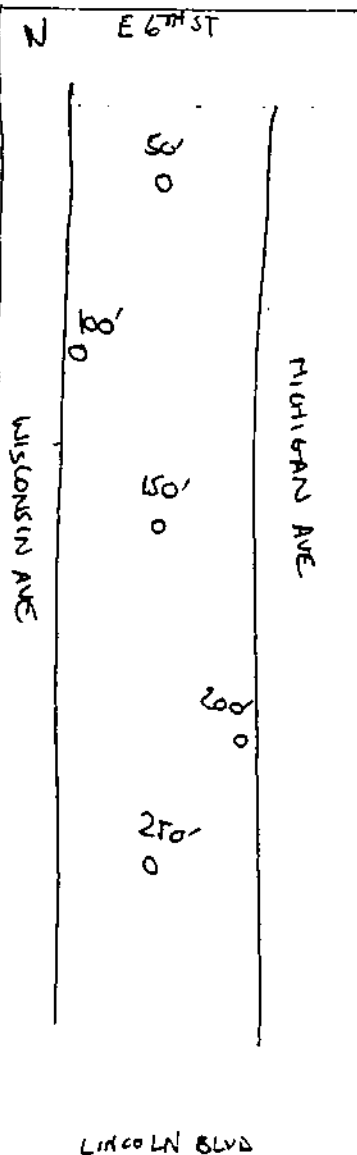
SAMPLE TIME

14:01

CS- 17991

SP- 124413

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS
DECONTAMINATED K PER SAP
 - ③ FSCS # CSS-S-006115
 - ④ GPS # TZE10203
- ADDITIONAL NOTES: NONE



LINCOLN BLVD

DAVID SPIELMAN — 10.20.03 — *David Spielman*

Location ALLEY #62

Date 10-20-03

Project Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-20-03

14:09 ON-SITE ALLEY #62

DIMENSIONS 295 FT X 14 FT

CONSTRUCTION ¹⁰⁻¹⁰⁻⁰³ PACKED SOIL AND GRAVEL

PERIMETER (RESIDENTIAL)

HOMES/YARDS/DRIVENAYS/SITES

SAMPLE TIME
14:22

CS- 17992

SP- 124414
ALLEY 62

SAMPLE TIME
DUPLICATE
14:24

CS- 17993

SP- 124415
DUPLICATE

① NO VISIBLE VERMICULITE

③ SAMPLING EQUIPMENT IS TO BE
DECONTAMINATED AS PER SAP

⑤ FSD# 006115 & 006116

⑦ GPS# T2 F10203

ADDITIONAL NOTES: NONE

DS-10-20-03

DAVID SPIELMAN - 10-20-03

LINCOLN BLVD

50'
00'

100'
00'

50'
00'

200'
00'

250'
00'

WISCONSIN AVE

MICHIGAN AVE

E 8TH ST

David Spelman

Location ALLEY #63

Date 10-20-03

Project Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS-10-20-03

14:28 ON SITE ALLEY #63

RAINING (MODERATE-HARD)

DIMENSIONS 297 FT X 14 FT

CONSTRUCTION ¹⁰⁻¹⁰⁻⁰³ SOIL PACKED

SOIL AND GRAVEL ¹⁰⁻¹⁰⁻⁰³

PERIMETER (RESIDENTIAL)

SAMPLE TIME
14:38

CS- 17994

SP- 124415

① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT

DECONTAMINATED AS PER SAP

③ FSD# CS-5-006116

④ GPS# TLG-10203

ADDITIONAL NOTES:

SMALL QTY OF VISIBLE
VERMICULITE IN GRASS
NEXT TO DOG RUN IN
BACK YARD ASSOCIATED WITH
813 WISCONSIN AVE PROP.

DS-10-20-03

DAVID SPIELMAN - 10-20-03

813
WISCONSIN AVE

David Spelman

N

WISCONSIN AVE

E 8TH ST

E 9TH ST

MICHIGAN AVE

88

ALLEY # 61

Date 10-20-03

LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

DS 10-20-03

14:50 ON SITE ALLEY # 61

DIMENSIONS: 348 FT. X 16 FT.

CONSTRUCTION: PACKED SOIL
AND GRAVEL (3" L OF GRAVEL)

PERIMETER (MIXED)

E: RESIDENTIAL (FENCED)

W: COMMERCIAL (FENCED)

SAMPLE TIME
13:00

CS- 17995

SP- 124416

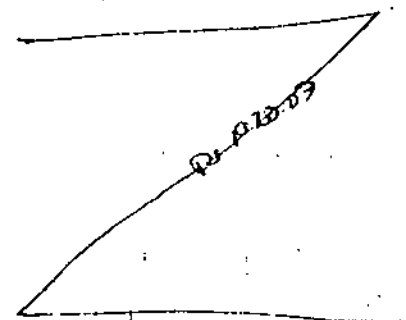
① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT
DECONTAMINATED AS PER SAP

③ FSDS# CSS-S-006116

④ GPS# T2H70203

ADDITIONAL NOTES: NONE



N

EXT. OF LINCOLN BLVD

MICHIGAN AVE

50'

100'

150'

200'

250'

COMMERCIAL LOTS

TO MONTANA ATHLETIC CLUB

UNNAMED ROAD

ALLEY # 64

Date 10-20-03

LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

DS 10-20-03

15:10 ON SITE ALLEY # 64

DIMENSIONS 300 FT X 16 FT

CONSTRUCTION: PACKED SOIL
AND GRAVEL — DS 10-20-03

PERIMETER (RESIDENTIAL)

HOMES/YARDS/DRIVEWAYS/SITES

SAMPLE TIME
15:10

CS- 17996

SP- 124417

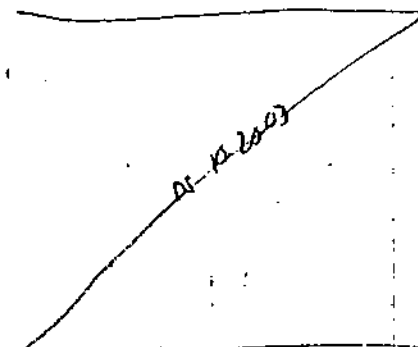
① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP

③ FSDS# CSS-S-006117

④ GPS# T2H70203

ADDITIONAL NOTES: NONE



N

LINCOLN BLVD

MINNESOTA AVE

50'

100'

150'

200'

250'

WISCONSIN AVE

E 8TH ST

90

Location

ALLEY #65

Date 10-20-03

Project/Client

LIBBY ASBESTOS PROJECT

EPA REG-8
VOLPE

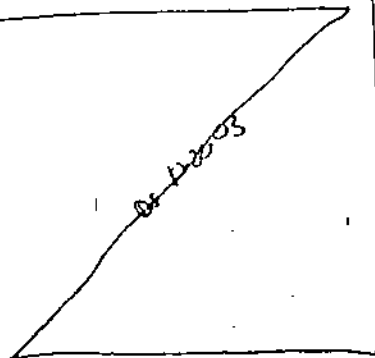
15:28 ON SITE ALLEY #65
 DIMENSIONS 30 FT X 12 FT
 CONSTRUCTION: PACKED
 SOIL AND GRAVEL
 PERIMETER (RESIDENTIAL)
 HOMES/YARDS/SHEDS/DRIVEWAYS

SAMPLE TIME
 15:40

CS- 17997

SP- 124418

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006117
- ④ GPS# T2J10203
- ADDITIONAL NOTES: NONE



E 8TH ST

N

MINNESOTA AVE

E 9TH ST

DAVID SPIELMAN — 10-20-03 — David Spiel

ALLEY #66

Date 10-20-03

Project/Client

LIBBY ASBESTOS PROJECT

EPA REG-8
VOLPE

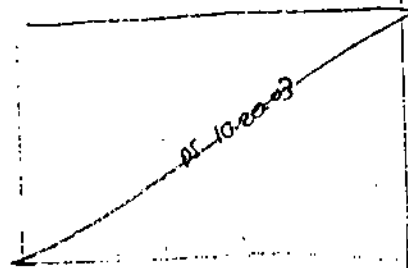
15:50-16:05 COFFEE BREAK
 (COLD + HARD RAIN CONTINUES)
 16:15 ON SITE ALLEY #66
 DIMENSIONS 30 FT X 18 FT
 CONSTRUCTION: PACKED
 SOIL AND GRAVEL
 PERIMETER (RESIDENTIAL)
 HOMES/YARDS/DRIVEWAYS/SHEDS

SAMPLE TIME
 16:30

CS- 17998

SP- 124419

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT
IS DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006117
- ④ GPS# T2K10203
- ADDITIONAL NOTES: NONE



AS 10-20-03
 MINNESOTA AVE
 DAKOTA AVE

50'

100'

150'

200'

250'

MINNESOTA AVE

DAVID SPIELMAN — 10-20-03 — David Spiel

92

Location: ALLEY # 67

Date: 10.20.03

Project: LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~DS 10-20-03~~

16:47 ON SITE ALLEY # 67

DIMENSIONS 298 FT X 18 FT

CONSTRUCTION PACKED SOIL
AND GRAVEL, PARTIALLY PAVED

PERIMETER (MIXED)

N: RESIDENTIAL

S: COMMERCIAL

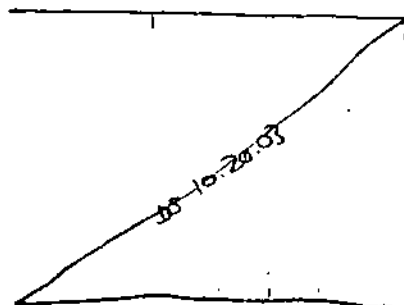
SAMPLE TIME
16:53

CS- 17999

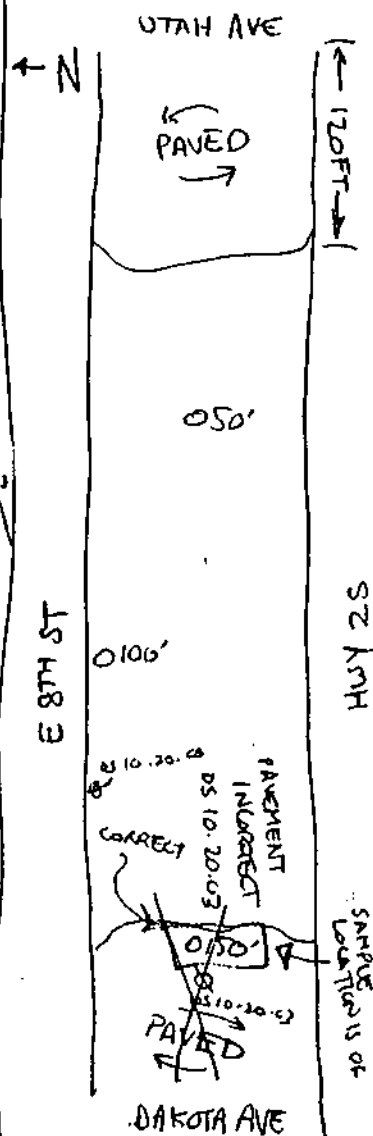
SP- 124420

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006118
- ④ GPS# T2L10203

ADDITIONAL NOTES: NONE



DAVID SPIELMAN — 10.20.03 — David Spiel



Location: ALLEY # 68

Date: 10.20.03

Project: LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~DS 10-20-03~~

17:02 ON SITE ALLEY # 68

DIMENSIONS: 285 FT X 18 FT

CONSTRUCTIONS: PACKED SOIL
AND GRAVEL — DS 10-20-03

PERIMETER (MIXED)

W: RESIDENTIAL

E: RESIDENTIAL + COMMERCIAL

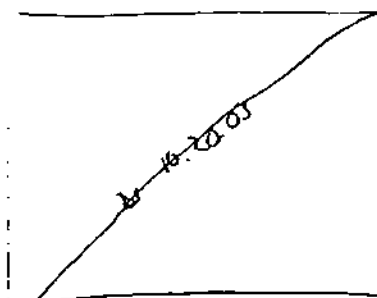
SAMPLE TIME
17:14

CS- 18000

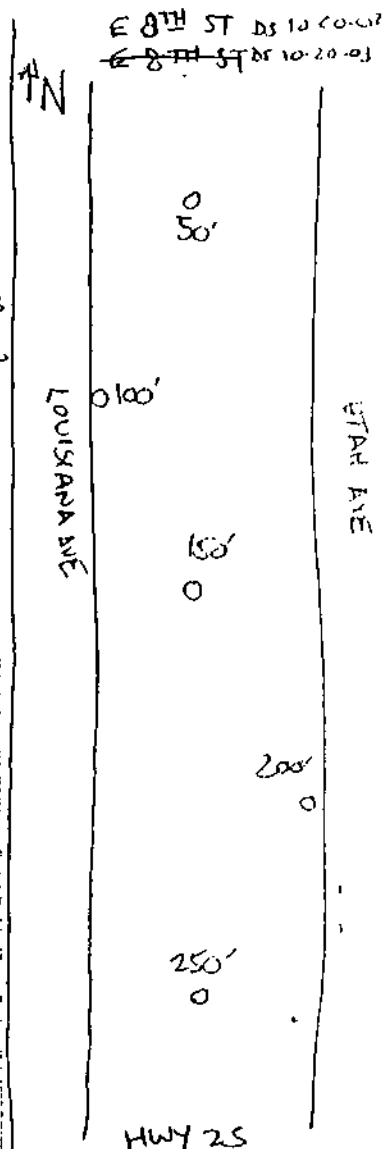
SP- 124421

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP
- ③ FSDS# CSS-S-006118
- ④ GPS# T2M10203

ADDITIONAL NOTES: NONE



DAVID SPIELMAN — 10.20.03 — David Spiel



DS 10-21-03

0907 ON SITE AUEY# 68 69

DS 10-21-03

DIMENSIONS 297 FT x 19 FT

CONSTRUCTION: PACKED SOIL
AND GRAVEL

PERIMETER (RESIDENTIAL)

YARD/HOMES/SHEDS/DRIVEWAYS

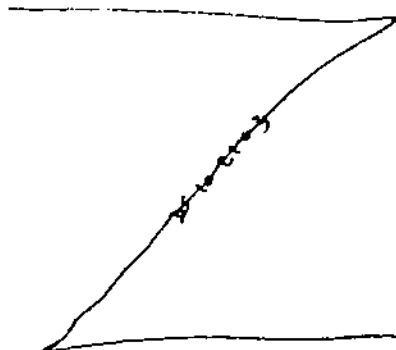
SAMPLE TIME
09:22

CS- 18002

SP- 124422

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED A PER SAP
- ③ PSDS# CSS-S-006119
- ④ GPS# T2A10213

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - David Spiel

LOUISIANA AVE
DS 10-21-03
E 8th STN
DS 10-21-03

N

DAKOTA AVE E 8th ST.
DS 10-21-03DS 10-21-03
LINCOLN BLVD

UTAH AVE

DS 10-21-03

10-21-03

DS 10-21-03

0933 ON-SITE AUEY# 70

DIMENSIONS 297 FT x 18 FT

CONSTRUCTION HARD PACKED
SOIL AND GRAVEL

PERIMETER (RESIDENTIAL)

YARD/HOMES/SHEDS/DRIVEWAYS

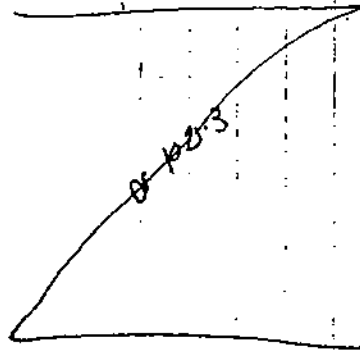
SAMPLE TIME
09:43

CS- 18003

SP- 124423

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT
IS DECONTAMINATED A PER SAP
- ③ PSDS# CSS-S-006119
- ④ GPS# T2B10213

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - David Spiel

N

E 8th ST

DAKOTA AVE

0
50'

100'

150'
0200'
0250'
0

MINNESOTA AVE

LINCOLN BLVD

Location ALLEY # 71

Date 10-21-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

~~DS-10-21-03~~

0952 ON SITE ALLEY # 71
 DIMENSIONS 294FT x 15FT
 CONSTRUCTION ROAD BASE (3")
 (PEA GRAVEL) AND SOIL
 PERIMETER (RESIDENTIAL)
 YARDS/HOMES/SHEDS/DRIVEWAYS

SAMPLE TIME
10:20

CS- 18004

GP- 124424

① "MED-HEAVY" VISIBLE VERMICULITE
 ALONG GRASS AT THE NW
 CORNER OF THE ALLEY, BY
 A NEW STOCKADE FENCE
 ② SAMPLING EQUIPMENT IS
 DECONTAMINATED AS PER
 SAP — ~~DS-10-21-03~~

① PDS# CSS-3-006114

① GPS# T2C10213

ADDITIONAL NOTES: HOME AT
 CORNER W. LINCOLN/MAIN HAS
 NO ADDRESS, YARD HAS VISIBLE
 VERMICULITE THROUGHOUT—
~~DS-10-21-03~~

DAVID SPIELMAN — 10-21-03

LINCOLN BLVD

N

PROPERTY

IDAHO AVE

MAIN AVE

0
50'0
100'150'
0200'
0250'
0

W. 8TH ST

David Spielman

Location ALLEY # 72 # 73

Date 10-21-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

~~DS-10-21-03~~

1025 ON SITE ALLEY # 72

DIMENSIONS: 276FT x 14FT

CONSTRUCTION: ASPHALT PAVED, HIGH GRAVEL
 CONTENT (SOFT) — ~~DS-10-21-03~~

PERIMETER (RESIDENTIAL) ~~DS-10-21-03~~ (MIXED)

W: HOTEL APARTMENT BLOCK

E: RESIDENTIAL AND COMMERCIAL

BOUNDARIES N: W. 8TH ST W: IDAHO AVE
~~DS-10-21-03~~ S: HWY 2 E: MAIN AVE

NOTES: PAVED ALLEYS DO NOT REQUIRE SAMPLING,
 AND NO VISIBLE VERMICULITE IN THE AREA.

1034 ON SITE ALLEY # 73

DIMENSIONS: 276FT x 12FT

CONSTRUCTION: BLACK TOP PAVED, GOOD CONDITION

PERIMETER (MIXED) — ~~DS-10-21-03~~

BOUNDARIES N: LINCOLN BLVD W: MAIN AVE
~~DS-10-21-03~~ S: W. 8TH ST E: CALIFORNIA AVE

NOTES: VERMICULITE OBSERVED IN FLOWERBED IN
 EAST SIDE MIDDLE SECTION OF ALLEY. ASSOCIATED WITH
 EXTENSIVE GARDENS/FLOWERBEDS AT BACK YARD OF
 720 CALIFORNIA AVE. NO VISIBLE VERMICULITE IN
 THE ALLEY, BUT THE FLOWERBED EXTENDS BEYOND THE
 YARD'S FENCELINE. NO SAMPLING TAKEN, DUE
 TO PAVED ALLEY — ~~DS-10-21-03~~

DAVID SPIELMAN — 10-21-03

David Spielman

Location ALLEY #74

Date 10-21-03

Project / Client

LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

DS 10-21-03

10:47 ON-SITE ALLEY #74

~~PERIMETER DS 10-21-03~~

DIMENSIONS 284FT X 16FT

CONSTRUCTION PAVED (ASPHALT AND GRAVEL) FAIR TO POOR CONDITION DS 10-21-03

~~PERIMETER MIXED DS 10-21-03~~~~BOUNDARY DS 10-21-03~~

- ① NO VISIBLE VERMICULITE
- ② NO SAMPLING REQUIRED AT PAVED ALLEYS DS 10-21-03

ADDITIONAL NOTES: NONE DS 10-21-03

LATE NOTE HOME AT
804 CALIFORNIA
HAS VERMIC IN A
BACKYARD GARDEN

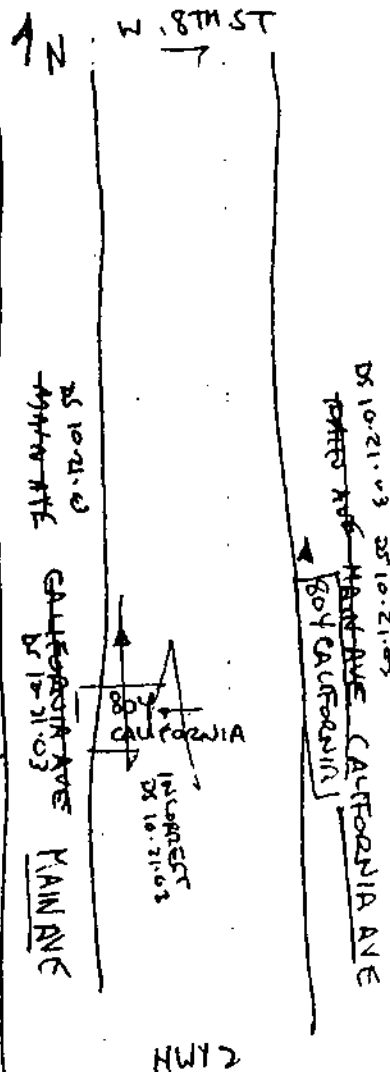
DS 10-21-03
LOOK AT SOIL BEHIND
FENCE IN ALLEY
TRACE
VISIBLE

LATE NOTE
DS

10-21-03

VERMIC NOT IN
ALLEY SOIL, BUT IS
IN PILE IN THE
ALLEY FROM THE
804 CAL. AVE. GARDEN,
ON TOP SCREEN'S SOIL

DAVID SPIELMAN - 10-21-03 - David Spielman



Location ALLEY # 75

Date 10-21-03

Project / Client

LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

DS 10-21-03

11:26 ON SITE ALLEY # 75

DIMENSIONS 296FT X 18FT

CONSTRUCTION: PAVED SOIL

PERIMETER (RESIDENTIAL)

HOMES/STANDS/DRIVEWAYS/STEPS

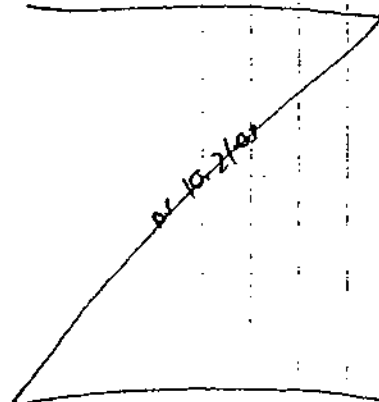
SAMPLE TIME
11:36

CS- 18005

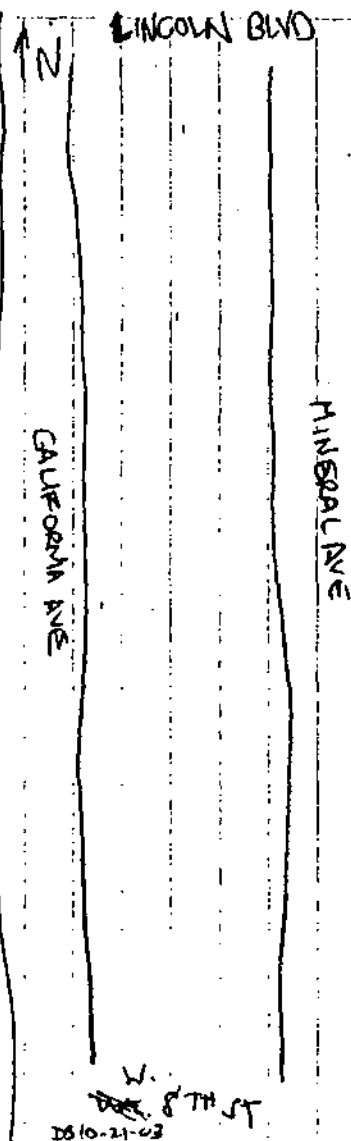
SP. 124425

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
- ③ PDS# CS-5-006120
- ④ GPS# T2010213

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - 10-21-03 - David Spielman



Location: AUEY #76, #77 Date: 10-21-03
Project/Client: LIBBY ASBESTOS PROJECT EPA REG #
VOLTS
~~05-10-21-03~~

11:47 ON SITE AWEY #76

DIMENSIONS · 296 FT x 14 FT

CONSTRUCTION ASPHALT PAVED - GOOD CONDITION
PERIMETER (MIXED)

W: RESIDENTIAL : YARDS/PARKING

E: MOTEL BLOCK - EVERGREEN MOTEL

- ③ NO VISIBLE VERMICULITE IN THE AREA, NO SAMPLING REQUIRED ON PAVED AWEYS ~~11/10/16~~

- ② BOUNDARIES: N. W. 8TH ST W: CALIFORNIA AVE
~~1510 1/2 ST~~ S: HWY 2 E: MINERAL AVE

12:00-13:45 AT OFFICE - DS WORKING ON PAPERS RELATED
TO UPCOMING C.I.C. POSITION FOR JANUARY 2004 HERE.
DE WORKING ON TRAVEL/EXPENSE PATTERNWORK FOR
END OF SEASON DEPARTURE DS 10-21-02

13:45-14:15 LUNCH

14:15 ON SITE AWEY # 71

NO AWAY HERE, THIS IS PART OF PAVED DRIVE AND
PARKING LOT OF COMMERCIAL BUSINESSES OFF HWY 2

DAVID SPIELMAN — 10.24.03 — Dain Seil

Location ALLEY #78 Date 10-21-03
Project / Client LIBBY ASBESTOS PROJECT EMR REG-8
OLPE
05-10-21-03

14:19 ON SITE ALLEY #78

DIMENSIONS 330FT X 20FT

CONSTRUCTION = PACKED
SOIL AND GRAVEL *20-40 mm*

PERIMETER (MIXED)

W: PARKING AND COMMERCIAL
AND RESIDENCES

E: RESIDENTIAL: HOMES,
YARDS, SHEDS ~~to 400~~

CS- 18006

SP- 124426

① VISIBLE VERMIL WHITE
(SEE SKETCH ON THIS PAGE)

(2) SAMPLING EQUIPMENT
DECONTAMINATED AS PER SAP

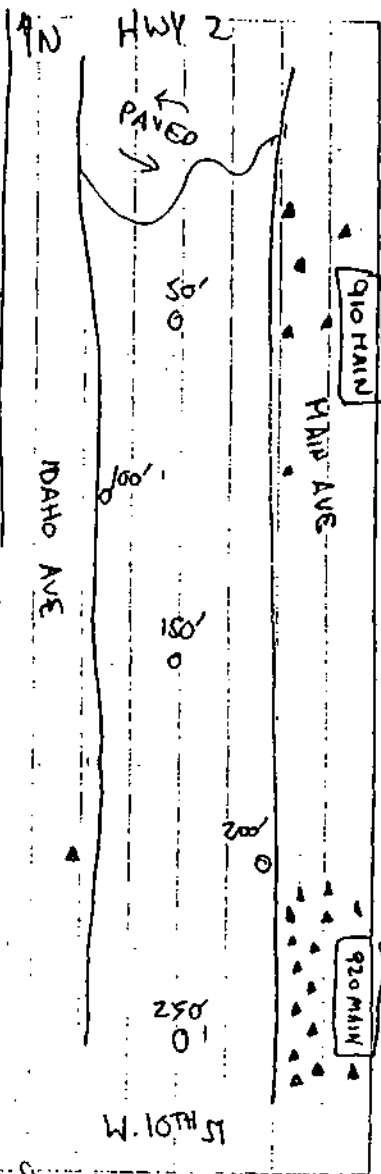
⑤ FSDS# CSS-S-006120

④ GPS# T2 F10213

ADDITIONAL NOTES: NOTE
LOCATIONS OF HEAVY
VERMICULITE ON SITE

SKETCH

DAVID SPIELMAN 10-21-03 - David Spiel



ALLEY #79

Date 10-21-03

LIBBY ASBESTOS PROJECT EPA REG-8

VOLPE

DS-10-21-03

MISS ON SITE ALLEY #79

DIMENSIONS 281 FT X 18 FT

CONSTRUCTION ROAD BASE

AND PACKED SOIL (1ST 114

FT NO. TO SOUTH. IS PAVED)

PERIMETER (MIXED)

W: RESIDENTIAL + COMMERCIAL

E: RESIDENTIAL + COMMERCIAL

SAMPLE TIME
15:03

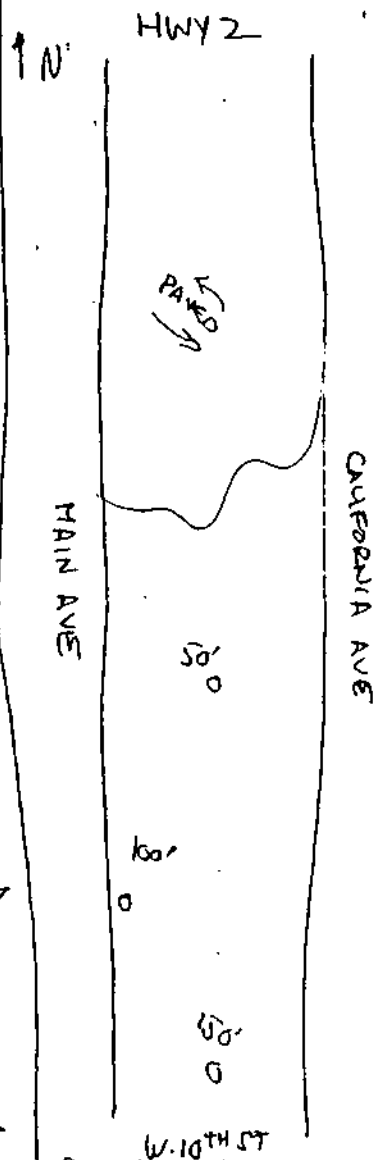
CS- 18007

SP- 124427

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
 - ③ FSDS # CSS-S-006120
 - ④ GPS # T2F10213
- ADDITIONAL NOTES: NONE

DS-10-21-03

DAVID SPIELMAN - 10-21-03 - Soil Spill



ALLEY #80

Date 10-21-03

LIBBY ASBESTOS PROJECT EPA REG-8

VOLPE

DS-10-21-03

MISS ON SITE ALLEY #80

DIMENSIONS 202 FT X 15 FT

CONSTRUCTION PACKED SOIL

AND GRAVEL - DS-10-21-03

PERIMETER: (MIXED)

W: COMMERCIAL + RESIDENTIAL

E: RESIDENTIAL - DS-10-21-03

NORTH END IS DEAD-END AT

FENCE FOR HWY 2 PARKING

SAMPLE TIME
15:21

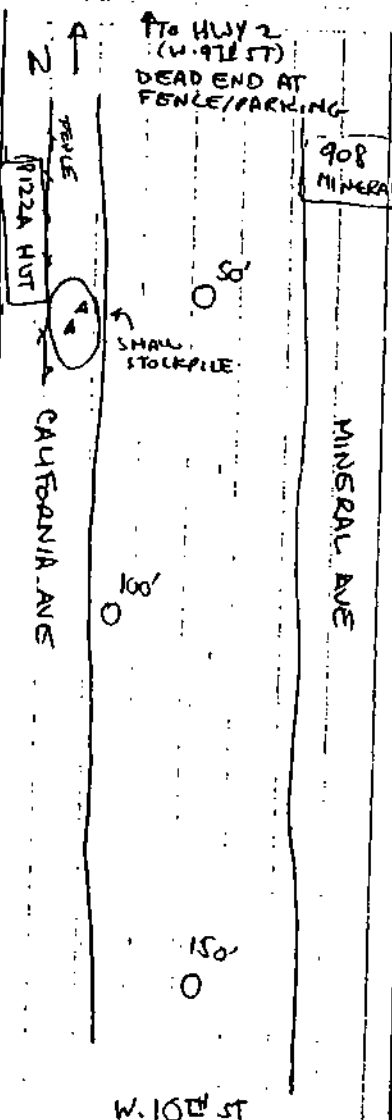
CS- 18008

SP- 124428

- ① SMALL QTY VISIBLE VERMICULITE IN STOCKPILE (GRASS) / SOIL / GARDEN DEBRIS
- NW CORNER OF ALLEY, MAY BE ASSOCIATED WITH BACKYARD OF 901 MINERAL AVENUE PPTY.
- ② FSDS # CSS-S-006121
- ③ GPS # T2G10213

DS-10-21-03

DAVID SPIELMAN - 10-21-03 - Soil Spill



ALLEY #81

Date 10-21-03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME~~DS 10-21-03~~

16:07 ON SITE ALLEY #81

DIMENSIONS 294 FT X 20 FT

~~CONSTRUCTION: PAVED SOFT~~~~AND GRAVEL - DS 10-21-03~~

PERIMETER: (MIXED)

INCLUDES DRIVEWAYS FOR

COMMERCIAL BUSINESS AND
ALLEY LETS OUT ONTO HWY 2

CONSTRUCTION: SOFT ASPHALT

COVERED BY SOIL/GRAVEL

① NO VISIBLE VERMIL WHITE

② NO SAMPLING REQUIRED

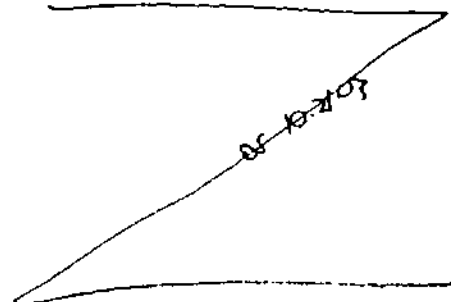
IN PAVED ALLEYS - DS 10-21-03

ADDITIONAL NOTES:

NORTH HALF OF ALLEY IS

A SERVICE ROAD FOR

SEVERAL BUSINESSES.



DAVID SPIELMAN - 10-21-03 - David Spiel

HWY 2 (W 9th ST)

MINERAL AVE

PAVED

MONTANA AVE

W. 10TH ST

ALLEY #82

Date 10-21-03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME~~DS 10-21-03~~

16:23 ON SITE ALLEY #82

DIMENSIONS: 345 FT X 12 FT

CONSTRUCTION: PAVED SOIL

W/GRAVEL - DS 10-21-03

PERIMETER (RESIDENTIAL)

HOMES/YARDS/GHEDS/FENCE

CS- 18009

SP- 124429

SAMPLE TIME

04:19

① HEAVY CONCENTRATION &
VISIBLE VERMIL ALONG
GRASS STRIP, BUT RIGHT
NEXT TO ALLEY - SEE SKETCHSEVERAL FLAKES IN GRAVEL
W. 10-21-03
(ROAD) (TRAVELLED PART)
OF ALLEY, EASY TO SEECONCENTRATIONS IN SOIL NEXT
TO THE GRAVEL COVERED PART② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SP

③ FDS# CSS-S-006121

④ GPS# T2H10213

DAVID SPIELMAN - 10-21-03 - David Spiel

↑ N

W. 10TH ST

50'

0 100'

150'

250'

198 FT

200'

IDAHO AVE

UTILITY POLE - MAIN AVE FENCE GREEN

W. 11TH ST DS 10-21-03
W. BUSH ST

Location ALLEY #83
Project / Client LIBBY ASBESTOS PROJECT

Date 10-21-03
EPA REG-8
VOLUME

~~10-21-03~~

16:53 ON SITE ALLEY #83
DIMENSIONS 347 FT X 12 FT
CONSTRUCTION: PACKED SOIL
AND GRAVEL ~~10-21-03~~
PERIMETER (RESIDENTIAL)
HOMES/YARDS/SHEDS/DRIVEWAYS

SAMPLE TIME
17:09

CS-18010

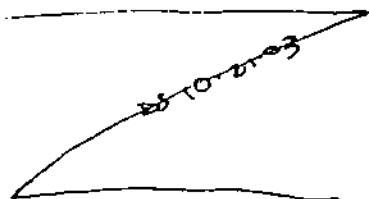
SP-124430

① VISIBLE VERMICULITE IN
ALLEY, A 10 FT LONG PATCH
253 FT FROM NORTH END. ALSO
A FEW FLAKES SEEN AT THE
SOUTHERNMOST 10 FT OF ALLEY

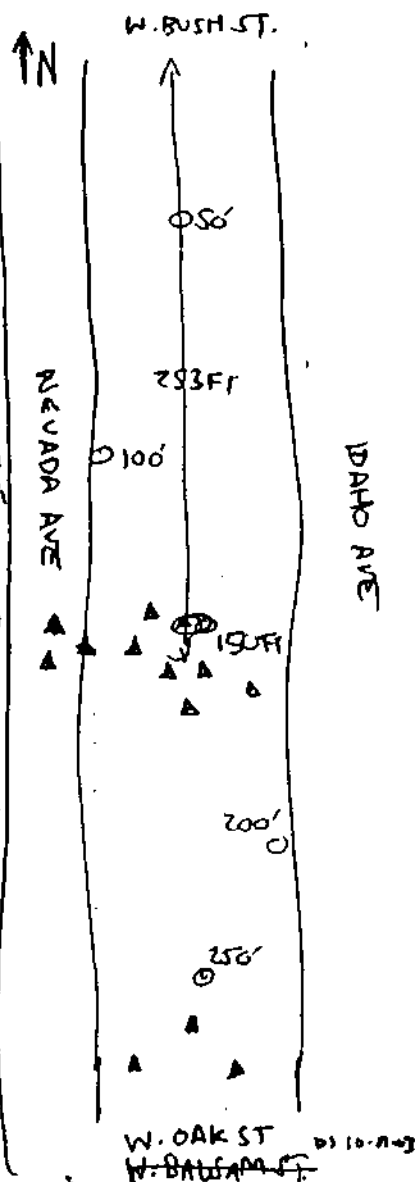
② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP

③ FSDS# CSS-S-006121

④ GPS# T2J10213



DAVID SPIELMAN - 10-21-03 - DAVID SPIELMAN



Location ALLEY #84
Project / Client LIBBY ASBESTOS PROJECT

Date 10-21-03
EPA REG-8
VOLUME

17:15 ON SITE ALLEY #84
DIMENSIONS 347 FT X 14 FT
CONSTRUCTION: PACKED
SOIL AND GRAVEL ~~10-21-03~~
PERIMETER (RESIDENTIAL)
YARDS/HOMES/SHEDS/FENCES/
DRIVEWAYS: 1016 CALIFORNIA
AVE APT #1, FRONT DOOR
AND DRIVEWAY FACE ALLEY
CS-18011

SAMPLE TIME
17:34

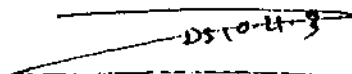
SP-124431

① TRACE VISIBLE VERMIC.
AT SW CORNER OF ALLEY
IN GRASS. SMALL QTY ALSO
ASSOCIATED WITH YARD AND
DRIVEWAY FOR 1016 CAL.
AVE ~~10-21-03~~

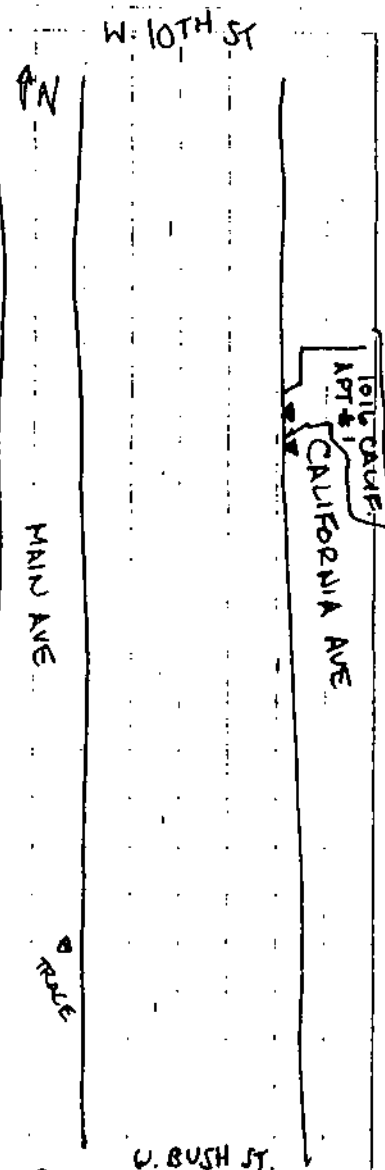
② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP

③ FSDS# CSS-S-006122

④ GPS# T2J10213



DAVID SPIELMAN - 10-21-03 - DAVID SPIELMAN



Location ALLEY #85

Date 10-22-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~10-22-03~~

W. BUSH ST.

~~W. 10TH ST.~~
10-22-03

09:17 ALLEY #85 ON SITE

DIMENSIONS 350 FT x 14 FT

CONSTRUCTION PACKED SOIL
PERIMETER (RESIDENTIAL)SAMPLE TIME
09:45

CS- 18013

SP 124432

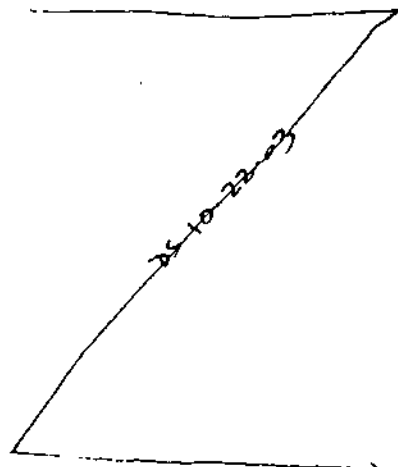
① NO USABLE VERMICULITE

② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP

③ FSDS # CSS-S-006123

④ GPS # 72A10223

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - 10-22-03 - David Spiel

↑ N

50'

○

100'

150'

○

200'

○

250'

○

300'

○

W. OAK ST.

10-22-03
IDAHO AVE
MAIN AVE

10-22-03

Location ALLEY #86 B7

Date 10-22-03

Project / Client LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

~~10-22-03~~

09:50 ON SITE ALLEY #87

DIMENSIONS 301 FT x 14 FT

CONSTRUCTION PACKED SOIL

PERIMETER: RESIDENTIAL

SAMPLE TIME
10:01

CS- 18014

SP- 124433

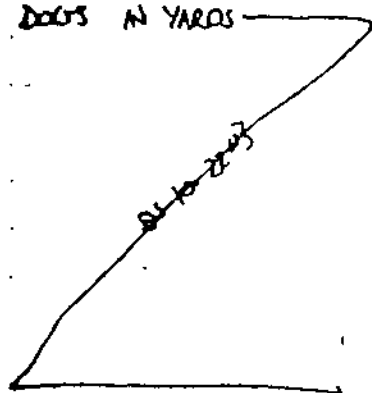
① NO USABLE VERMICULITE

② SAMPLING EQUIPMENT
IS DECONTAMINATED AS PER SAP

③ FSDS # CSS-S-006123

④ GPS # 72B10223

ADDITIONAL NOTES:

TWO AG, LOW, AGGRESSIVE
DOGS IN YARDS

DAVID SPIELMAN - 10-22-03 - David Spiel

↑ N

W. OAK ST.

50'

○

100'

150'

○

200'

○

250'

○

W. FLOWER ST.

10-22-03
IDAHO AVE
MAIN AVE

ALLEY #89

Date 10-22-03

Project / Client LIBBY ASBESTOS PROJECT

EPA REG-8
VOLUME

DS-10-22-03

10:14 ON SITE ALLEY #89

DIMENSIONS: 302 FT x 12 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL - 10-22-03

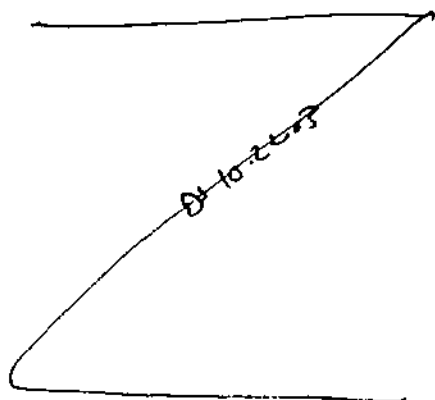
PERIMETER: RESIDENTIAL

SAMPLE TIME
10:25

CS- 18015

SP- 124434

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS DECONTAMINATED AS PER SAP
 - ③ FSDS# CSS-5-006123
 - ④ GPS# T2C10223
- ADDITIONAL NOTES: NONE



DAVID SHERMAN — 10-22-03 — David Sherman

N

W. OAK ST

NEVADA AVE

0 100'

0 150'

0 200'

0 250'

W. FLOWER ST

DAVID AVE

Location ALLEY # 86

Date 10-22-03

Project / Client LIBBY ASBESTOS PROJECT

EPA REG-8
VOLUME

DS-10-22-03

10:34 ON SITE ALLEY # 86

DIMENSIONS: 349 FT x 18 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL - 10-22-03

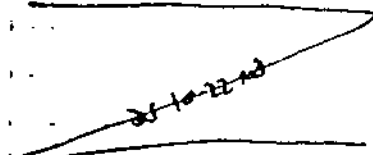
PERIMETER: RESIDENTIAL

SAMPLE TIME
10:49

CS- 18016

SP- 124435

- ① VISIBLE VERMICULITE IN GRASS ONLY AT MID. EASTSIDE OF ALLEY BEHIND A LARGE TAN COLOR GARAGE ASSOCIATED WITH PTX AT 1108 CALIFORNIA AVE
 - ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
 - ③ GPS# T2D10223
- ④ ADDITIONAL NOTES:
SOME ASPHALT PATCHES OR PAVEMENT REMNANTS



DAVID SHERMAN — 10-22-03 — David Sherman

N

W. BUSH ST

MAIN AVE

0 100'

0 50'

0 150'

0 200'

0 250'

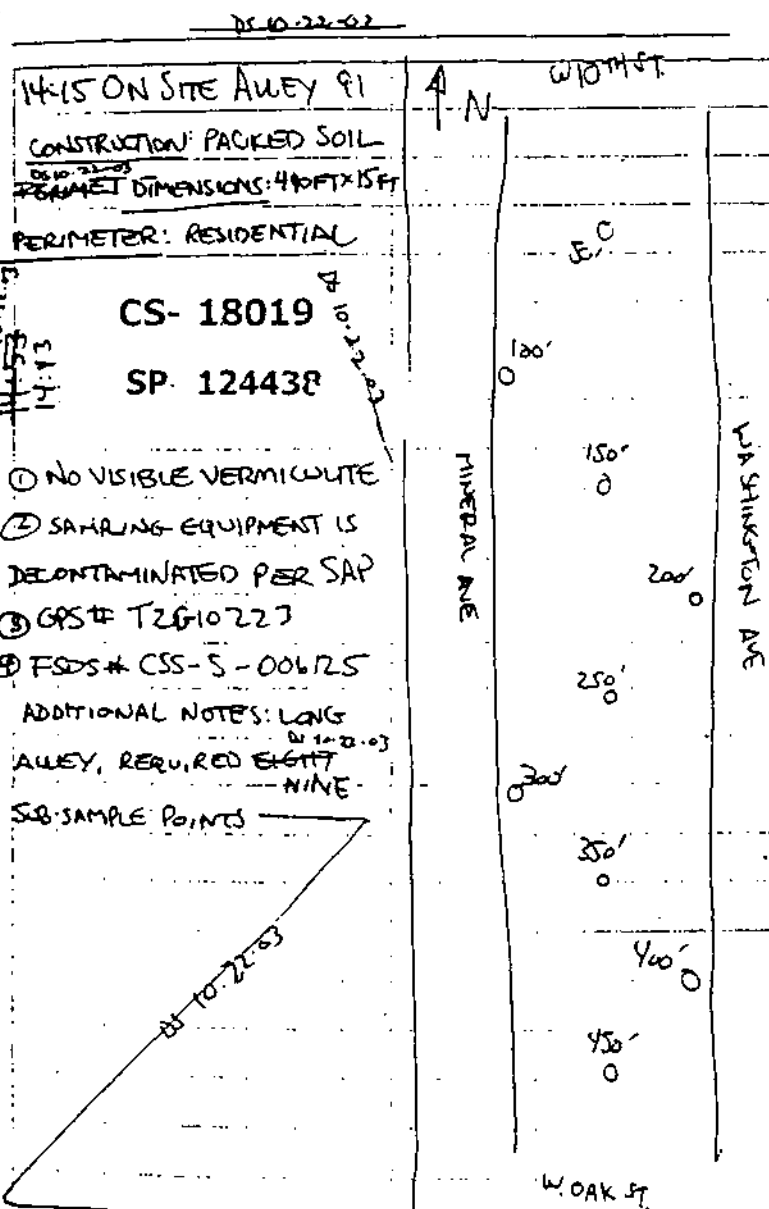
0 300'

W. OAK ST

CALIFORNIA AVE

1108 CALIFORNIA AVE

3
Location ALLEY #9 Date 10-22-03 119
Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
VOLE



DAVID SPIELMAN - 10-22-03 - David Spielman

120

Location ALLEY #92, #93, #94 Date 10-22-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
WOLFE

DS 10-22-0315:11 ON SITE ALLEY #92DIMENSIONS 28.5 FT x 20 FTCONSTRUCTION: ASPHALT PAVED, FAIR CONDITION W/SOME POTHOLES.

PERIMETER: MIXED. MOSTLY RESIDENTIAL EXCEPT NORTH END FRONTS ON HWY 2, IS COMMERCIAL
① NO VISIBLE VERMICULITE IN THE AREA, NO SAMPLING REQUIRED ON PAVED ALLEYS

BOUNDARIES N: HWY 2 W: MONTANA AVE
S: W. 10TH ST E: LOUISIANA AVE

15:20 ON SITE ALLEY #93NO ALLEY HERE, IT IS McDONALD'S PARKING LOT15:29 ON SITE ALLEY #94DIMENSIONS 51.4 FT x 20 FT.CONSTRUCTION ASPHALT PAVED, FAIR TO POOR CONDITIONPERIMETER RESIDENTIAL, AND A CHURCHBOUNDARIES N: W 10TH ST. W: MONTANA AVE.S: E. SPRUCE ST. E: LOUISIANA AVE.

① NO VISIBLE VERMICULITE, AND NO SAMPLING IS REQUIRED ON PAVED ALLEYS

DAVID SPIELMAN - DS 10-22-03 - David Spielman

Location ALLEY #95

Date 10-22-03
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
WOLFE

DS 10-22-0315:38 ON SITE ALLEY #95DIMENSIONS 41.4 FT x 15 FTCONSTRUCTION: PACKEDSOIL AND GRAVEL MIXEDPERIMETER: RESIDENTIALCS-18020SP-124735① NO VISIBLE VERMICULITE② SAMPLING EQUIPMENT ISDECONTAMINATED PER SAP③ PSCS # CSS-S-006125④ GPS # TZH10223ADDITIONAL NOTES: NONE

Life Note
SEVEN POINT COMPOSITE
DS 10-22-03

DAVID SPIELMAN - 10-22-03

121

Date 10-22-03

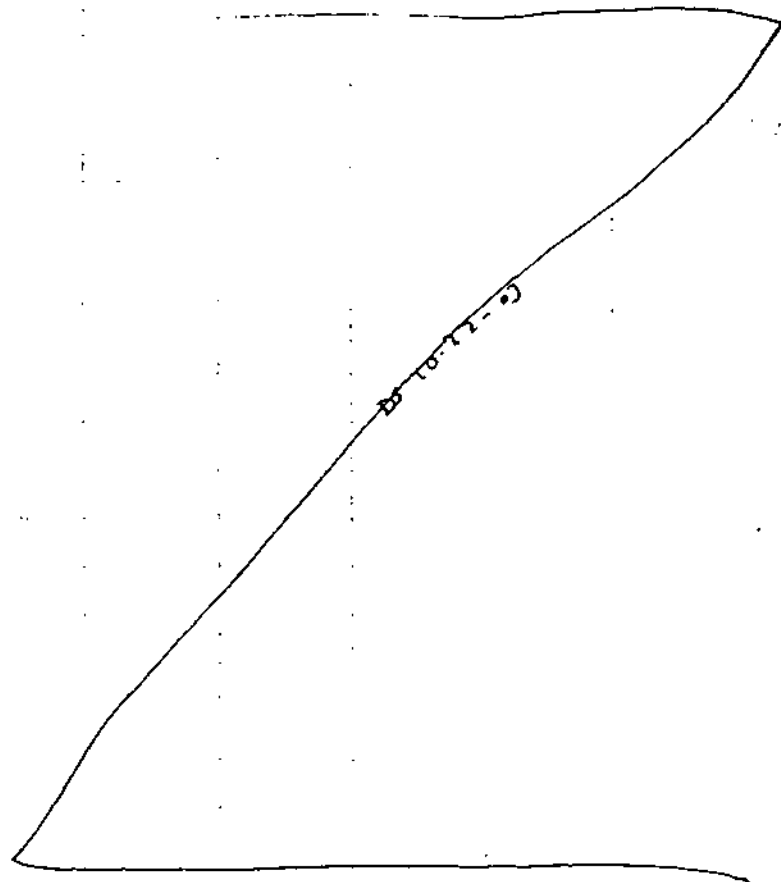
Location ALLEY #95
 Project / Client LIBBY ASBESTOS PROJECT EPA REG-8
WOLFE

DS 10-22-03W 10TH STLOUISIANA AVE0 50'0 100'150'200'250'0 200'200'PAVEDE. SPRUCE ST.(E. SPRUCE ST.)David Spielman

Location ALLEY #95Date 10-22-03Project / Client LIBBY ASBESTOS PROJECTEPA REG 8
VOLE10-22-03

IS-57 ADDITIONAL NOTE FOR ALLEY 95 — 10-22-03

VISIBLE VERMICULITE OBSERVED BEHIND 1022 UTAH
(SOUTH EAST END OF ALLEY) IN A PATCH BEHIND
¹⁰⁻²²⁻⁰³
~~STAKE~~ PICKET FENCE. SMALL QTY BUT VERY LARGE
FLAKES. 10-22-03



DAVID SPIELMAN — 10-22-03 — David Spiel

Location ALLEY #96Date 10-22-03Project / Client LIBBY ASBESTOS PROJECTEPA REG 8
VOLE10-22-03

1605 ON SITE ALLEY #96
DIMENSIONS: 302 FT X 15 FT
CONSTRUCTION: PACKED SOIL
AND GRAVEL — 10-22-03
PERIMETER: RESIDENTIAL

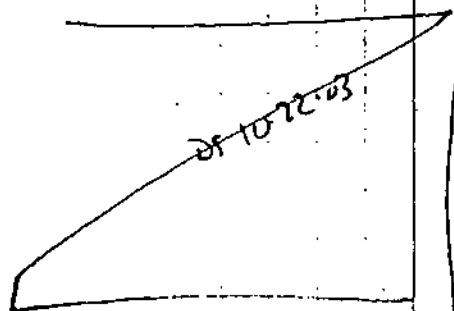
CS- 18341

SP- 124440

- ① NO VISIBLE VERMICULITE
② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP
③ FOS# CSS-S-006725
④ GPS# T2I10223

ADDITIONAL NOTES: ALLEY

97 TGS OFF TO SOUTH FROM
MIDPOINT OF ALLEY 96



DAVID SPIELMAN — 10-22-03 — David Spiel

DAKOTA AVE

WIDTH ST

E SPACE ST

UTAH AVE

Location ALLEY # 97

Project / Client

LIBBY ASBESTOS PROJECT

Date 10-22-03
EPA REG-8
VOLPE

DS-10-22-03

16:22 ON SITE ALLEY # 97

DIMENSIONS: 214 FT. X 12 FT.

CONSTRUCTION: PACKED SOIL

AND GRAVEL DS-10-22-03

PERIMETER: RESIDENTIAL

SAMPLE TIME

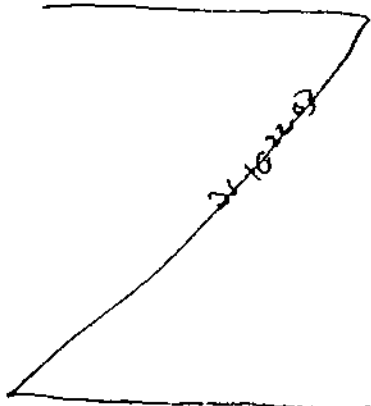
16:30

CS- 18342

SP- 124441

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FSDS # CS-5-006126
- ④ GPS # T2J10223

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - 10-22-03

DEAD END AT ALLEY 96

↑ N

UTAH AVE

DAKOTA AVE

0
50'0
100'0
150'0
200'

C. SPRUCE ST.

David Spiel

Location ALLEY # 98, # 99

Project / Client

LIBBY ASBESTOS PROJECT

Date 10-22-03
EPA REG-8
VOLPE

DS-10-22-03

16:36 ON SITE ALLEY # 98

DIMENSIONS 162 FT. X 14 FT.

CONSTRUCTION: ASPHALT PAVED, POOR CONDITION
 PERIMETER (MIXED) RESIDENTIAL AT EAST SIDE,
 WEST SIDE ENDS AT COMMERCIAL LOT AND PTYS.
 ON HWY 2 DS-10-22-03

① NO VISIBLE VERMICULITE IN THE AREA, NO
 SAMPLING REQUIRED ON PAVED ALLEYS DS-10-22-03

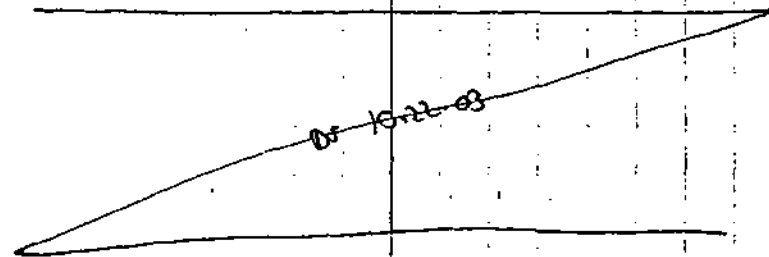
16:40 ON SITE ALLEY # 99

DIMENSIONS 55 FT. X 20 FT.

CONSTRUCTION: ASPHALT PAVED, POOR CONDITION
 PERIMETER: MIXED RESIDENTIAL
 ALONG SOUTH SIDE, BORDERS COMMERCIAL
 PTY ON NORTH SIDE DS-10-22-03

BOUNDARIES N: HWY 2 W: DAKOTA AVE
 S: SPRUCE ST E: HWY 2
 DS-10-22-03

① NO VISIBLE VERMICULITE, AND NO SAMPLING
 REQUIRED ON PAVED ALLEYS. DS-10-22-03



DAVID SPIELMAN - 10-22-03 - David Spiel

102

ALLEY #100

Date 10-22-03

LIBBY ASBESTOS PROJECT ~~EPAREG~~ VERGE~~10-22-03~~

16147 ON SITE ALLEY #100

DIMENSIONS: 249FT X 18FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL

PERIMETER RESIDENTIAL

SAMPLING
TIME

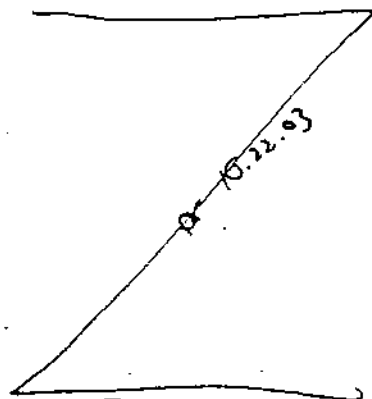
17:02

CS- 18343

SP- 124442

- (1) NO VISIBLE VERMICULITE
 (2) SAMPLING EQUIPMENT
 DECONTAMINATED PER SAP
 (3) ESDS # ESS-S-006126
 (4) GPS # T2K10223

ADDITIONAL NOTES: NONE



9TH ST

0
50'

100'

0

150'
0200'
0

MINNESOTA AVE

HWY 2

DAVID SPIELMAN - 10.22.03 - ~~David Spielman~~ SPRUCE ST.

ALLEY #101

Location

10-23-03

Date

10-23-03 129

Project / Client

LIBBY ASBESTOS PROJECT EPA REG-8

TAPE

10-23-03

09:10 ON SITE ALLEY #101

DIMENSIONS: 306 FT. X 14 FT.

CONSTRUCTION: VERY DEGRADED

ASPHALT, SOFT, PITHOLES,

AT LEAST 4" THICK.

PERIMETER: RESIDENTIAL

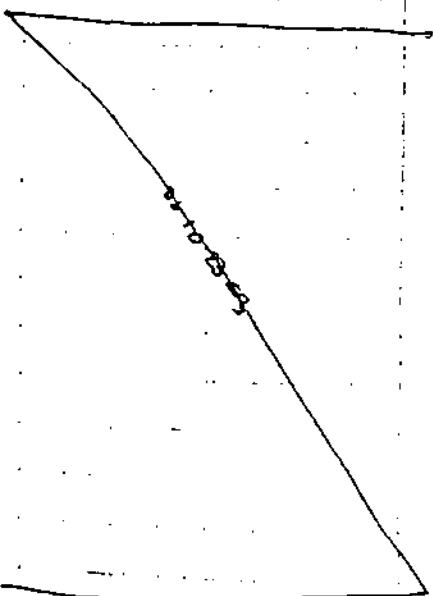
① NO VISIBLE VERMICULITE

IN THE AREA 10-22-03

② NO SAMPLING REQUIRED

ON PAVED ALLEYS 10-22-03

③ ADDITIONAL NOTES: NONE



DAVID SPIELMAN

10-23-03

David Spielman

130

Location ALLEY #102

Date 10.23.07

Project/Clean LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

-DS-10-23-03-

09:39 ON SITE ALLEY #102

DIMENSIONS: 343 FT X 14 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL - 05-10-23-03

PERIMETER: RESIDENTIAL

OPEN GRASS YARD ON

ENTIRE EAST SIDE

SAMPLE TIME

9:48

CS- 18345

SP- 124443

① NO VISIBLE VERMICULITE

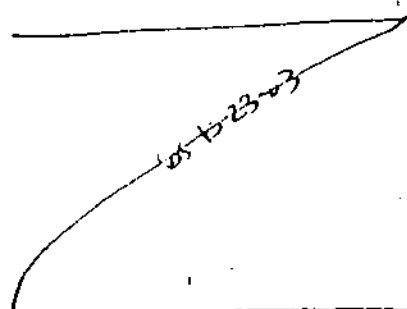
② SAMPLING EQUIPMENT IS

DECONTAMINATED AS PER SAP

③ PSDS IF CSS-5-020127

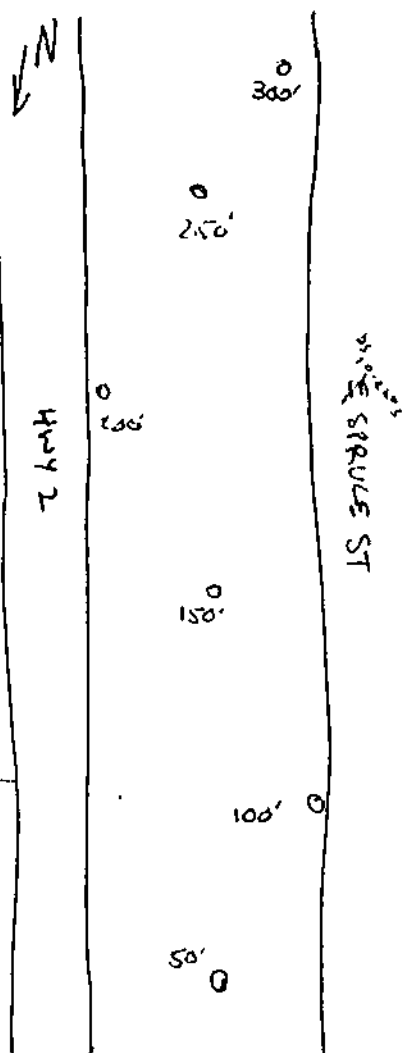
④ GPS IF T2A10233

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - 10.23.03

BAHAM ST.



LARCH ST

David Spielman

ALLEY #118

10.23.03

Location LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS 10-23-03

01:54 ON SITE ALLEY #118

DIMENSIONS: 336 FT X 14 FT

CONSTRUCTION: ASPHALT PAVED

WITH GRAVEL FILL FOR

POTHOLES - FAIR CONDITION

PERIMETER: (MIXED)

W: RESIDENTIAL

C: COMMERCIAL (ALONG HWY 2)

① NO VISIBLE VERMICULITE

② NO SAMPLING REQUIRED ON

PAVED ALLEYS - 05-10-23-03

ADDITIONAL NOTES: NONE

ALLEY #119

DS 10-23-03

Date 10-23-03

LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS 10-23-03

10:07 ON SITE ALLEY #119
 DIMENSIONS: 329 FT X 14 FT
 CONSTRUCTION: GRAVEL AND
 PACKED SOIL — DS 10-23-03
 PERIMETER (MIXED)
 W: RESIDENTIAL DS 10-23-03
 E: COMMERCIAL (EMPIRE
 FOODS ALONG HWY 2)

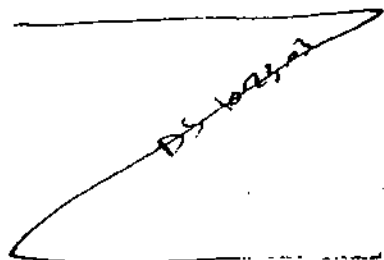
SAMPLE TIME

10:18

CS- 18346

SP- 124444

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP
 - ③ FSDS# CSS-S-006127
 - ④ GPS# T2B10233
- ADDITIONAL NOTES: NONE



DAVID SPELTMAN — 10-23-03

David Spil

CEDAR ST

HWY 2

DAKOTA AVE

POMAR ST

ALLEY #121

10-23-03

LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

DS 10-23-03

10:28 ON SITE ALLEY #121
 DIMENSIONS: 311 FT X 14 FT
 CONSTRUCTION: PACKED SOIL
 AND GRAVEL, PATCHES OF
 (OLD) ASPHALT — DS 10-23-03
 PERIMETER: (MIXED)
 W: RESIDENTIAL
 E: COMMERCIAL (ALONG HWY 2)

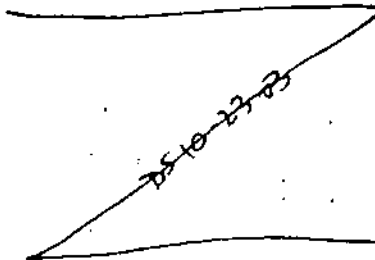
SAMPLE TIME

10:35

CS- 18347

SP- 124445

- ① NO VISIBLE VERMICULITE
 - ② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP
 - ③ FSDS# CSS-S-006127
 - ④ GPS# T2C10233
- ADDITIONAL NOTES: NONE



DAVID SPELTMAN — 10-23-03

David Spil

E. MAPLE ST

HWY 2

DAKOTA AVE

E. CEDAR ST.

ALLEY #122

Date 10-23-03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME~~10-23-03~~

10:43 ON SITE ALLEY #122

DIMENSIONS: 200 FT X 14 FT

CONSTRUCTION: ROAD BASE
(PACKED SAND AND GRAVEL)

PERIMETER: RESIDENTIAL

SAMPLE TIME

10:11

CS- 18348

SP- 124446

10-23-03

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FSDS# CSS-S-006128
- ④ GPS# T2D10233

ADDITIONAL NOTES: NONE
RESIDENT REPORTS THAT 4" OF ROADBASE PUT ON LAST WEEK, AND THERE IS VERMICULITE ON OR NEAR ALLEY UNDERNEATH.

DANNY ZAMBRANO REMAINS SEEING VERMICULITE AT MIDDLE/E. SIDE ALLEY PRIOR DURING CSS/RT.

- SAME DIG TO 6-8" TO GET TO ORIGINAL ALLEY

DAVID SPIELMAN — 10-23-03

DEAD END



YAKOTA AVE

UTAH AVE

0 150

100 0

50 0

E. CEDAR ST

David Spielman

ALLEY # 120

10-23-03

LIBBY ASBESTOS PROJECT EPA REG-8
VOLUME~~10-23-03~~

05:10:12 AT

10:11 ON SITE ALLEY #120

DIMENSIONS: 30 FT X 18 FT

CONSTRUCTION: PACKED SOIL
AND GRAVEL

PERIMETER (RESIDENTIAL)

SAMPLE TIME

11:26

CS- 18349

SP- 124447

10-23-03

SAMPLE TIME

11:34

CS- 18350

SP- 124447

10-23-03

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FSDS# CSS-S-006128
- ④ GPS# T2E10233

ADDITIONAL NOTES: NONE

DAVID SPIELMAN

10-23-03

ARROW ST

David Spielman



YAKOTA AVE

UTAH AVE

0 250

0 200

0 150

0 100

0 50

03
REG-8
LPE

Location ALLEY# 103 Date 10.23.03 137
Project / Client LIBBY ASBESTOS PROJECT EPA REG-P
VALE
10.23.03

13:25 ON SITE ALLEY#103
DIMENSIONS: 303FT X 13FT
CONSTRUCTION: PACKED SOIL AND
GRAVEL 10.23.03
PERIMETER: RESIDENTIAL

SAMPLE TIME

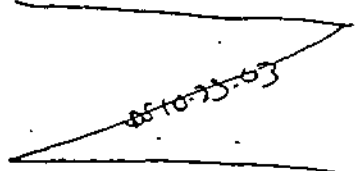
13:45

CS- 18351

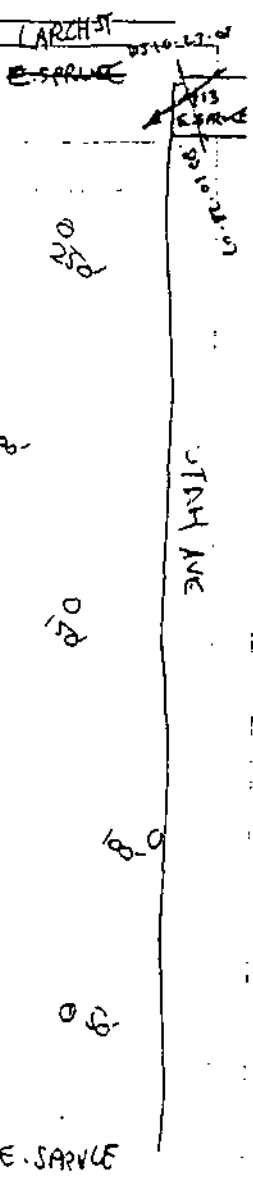
SP- 124448

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED PER CAP
- ③ ESDS# CS-S-006129
- ④ GPS# T2F10233

ADDITIONAL NOTES: A
SMALL SOIL PILE WITH TRACE
VISIBLE VERMICULITE IN THE
GRASS STRIP AT SW
NE CORNER OF ALLEY, INSIDE
PTY OF 413 E. SPRUCE ST.



DAKOTA AVE



DAVID SPIELMAN 10.23.03

Location ALLEY # 104

Date 10-23-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VAPE

DS-10-23-03

13:50 ON SITE ALLEY # 104

DIMENSIONS: 34 FT X 14 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL DS-10-23-03

PERIMETER: RESIDENTIAL

SAMPLE TIME

14:05

CS- 18352

SP- 124449

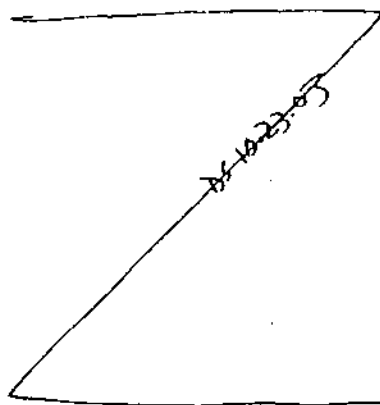
① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP

③ FSDS# CSS-S-006129

④ GPS# T2G10233

ADDITIONAL NOTES: NONE



DAVID SPIELMAN

10-23-03

LARCH ST

BALSAM ST

DAKOTA AVE

UTAH AVE

Location ALLEY # 117

Date 10-23-03

Project/Client LIBBY ASBESTOS PROJECT EPA REG-8 VAPE

DS-10-23-03

POPLAR ST

14:14 ON SITE ALLEY # 117

DIMENSIONS: 34 FT X 13 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL DS-10-23-03

PERIMETER: RESIDENTIAL

SAMPLE TIME

14:26

CS- 18353

SP- 124450

① VISIBLE VERMICULITE AT
171 FT FROM NORTH END OF
ALLEY. "HEAVY" VERMICULITE
IN SOIL ALONG GRASS ON
W. SIDE (MIDWAY) ASSOCIATED
WITH 1315 UTAH AVE.

② FSDS# CSS-S-006129

③ GPS# ~~T2H10233~~
T2H10233

④ ADDITIONAL NOTES:
OWNER OF 1315 UTAH REPORTS
SOILS ON REMOVAL LIST
(LARGE GARDEN IN BACKYARD)

DS-10-23-03

DAVID SPIELMAN

10-23-03

BALSAM ST

LARCH ST

DAKOTA AVE

UTAH AVE

1315 UTAH

0 250'

0 200'

0 150'

0 100'

171 FT

5'0"

136

0310-11-03

105 ALLEY #105

10-23-03

LIBBY ASBESTOS PROJECT EPA REG 8
WJLPE

~~—155-10-23.63~~

14:45 ON SITE ALLEY #105-

DIMENSIONS: 201 FT x 12 FT

CONSTRUCTION² PACKED SOIL

AND GRAVEL — 13-10-2203

PERIMETER: RESIDENTIAL

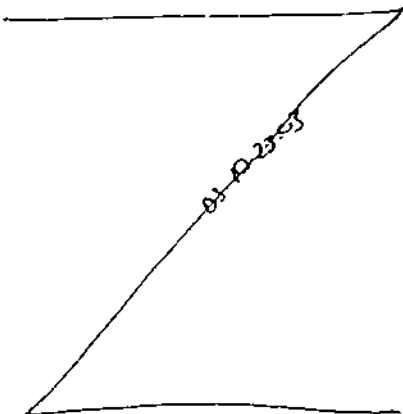
SAMPLE TIME 15:02

CS- 18354

SP- 124452

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FSDS# C55-S-006130
- ④ GPS # T2.T2I10233

ADDITIONAL NOTES: NONE



DAVID SPIELMAN - 10-23-03 - David Spiel

LARCH ST.
DEAD END AT CHURCH
PARKING LOT 1

UTAH AVE

LOUISIANA AVE

E. SERVICE ST.

AWAY # 106

10-23-03

-141-

LIBBY ASBESTOS PROJECT EPA REG 8
VOLPE

—25-10-73-15

15.06 ON SITE AWEY#106

DIMENSIONS 345 FT. X 12 FT.

CONSTRUCTION: PACKED SOIL

ANO GRAVEL -05-10-27-09

PERIMETER: RESIDENTIAL

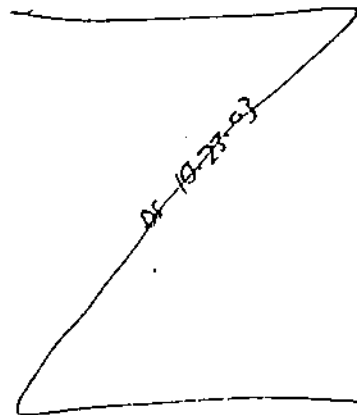
Sample Time 15:20

CS- 18355

SP- 124453

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FDS# CSS-S-006130
- ④ GFS# T2J10233

ADDITIONAL NOTES: NONE



DAVID SPIELMAN — 10.23.03 — David Spiel

BALSAM ST

MASONIC LODGE

五十二

LOUISIANA

LARCH ST

ALLEY # 115

LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

Date: 10-23-03

Date:

10-23-03

15:24 ON SITE ALLEY # 115
 DIMENSIONS: 339 FT X 16 FT
 CONSTRUCTION PACKED SOIL
 AND GRAVEL — 05-10-23-03
 PERIMETER: RESIDENTIAL
 CS- 18356
 SP- 124454

- ① NO VISIBLE VERMICULITE
 ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
 ③ FSDS# CSS-S-006130
 ④ GPS# T2K10233
 ADDITIONAL NOTES: NONE

DAVID SPIELMAN — 10-23-03 — David Spielman

POPLAR ST

UTAH AVE

LOUISIANA AVE

BAHAM ST

Location ALLEY # 116

Date: 10-23-03 143

LIBBY ASBESTOS PROJECT EPA REG-8 VOLPE

05-10-23-03

15:50 ON SITE ALLEY # 116
 DIMENSIONS 328 FT X 15 FT
 CONSTRUCTION GRAVEL AND
 PACKED SOIL — 05-10-23-03
 PERIMETER (RESIDENTIAL)

SAMPLE TIME

15:59

CS- 18357

SP- 124455

① "HEAVY" VISIBLE VERMIC
 IN GRASS ALONG ALLEY
 AT NORTH END, BOTH
 SIDES, ASSOCIATED WITH
 1406 UTAH AND ADJACENT
 HOUSE (NO ADDRESS, 1406
 1406) 1404 UTAH, AND
 1411 LOUISIANA AVENUES
 - ALSO, CLEANUP/EXCAVATION
 UNDERWAY AT SW CORNER OF
 THE ALLEY — 05-10-23-03

- ② SAMPLING EQUIPMENT IS
 DECONTAMINATED PER SAP
 ③ FSDS# CSS-S-006131
 ④ GPS# T2L10233

DAVID SPIELMAN — 10-23-03 — David Spielman

CEDAR ST

CLEANUP UNDERWAY

UTAH AVE

LOUISIANA AVE

POPLAR ST

LOCATION ALLEY #123

DATE 10.23.03

Project Client LIBBY ASBESTOS PROJECT EPA REG-8

VOL. 8

~~10.23.03~~

16:20 ON SITE ALLEY #123

DIMENSIONS 188 FT X 14 FT

CONSTRUCTION PACKED SOIL
AND GRAVEL-DEEP ROAD BASE

PERIMETER RESIDENTIAL

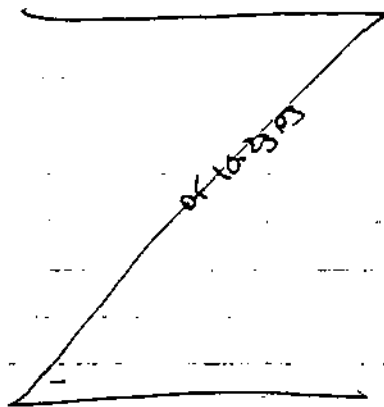
SAMPLE TIME
16:32

CS- 18358

SP- 124456

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP
- ③ FSDS# CSS-S-006131
- ④ GPS# TZM10233

ADDITIONAL NOTES: NONE



DEAD ENDS IN GRASS

RESIDENTIAL DRIVEWAYS
BETWEEN UTAH AVERESIDENTIAL DRIVEWAYS
BETWEEN LOUISIANA AVE0
150'

100' 0

80'
0

CEORST

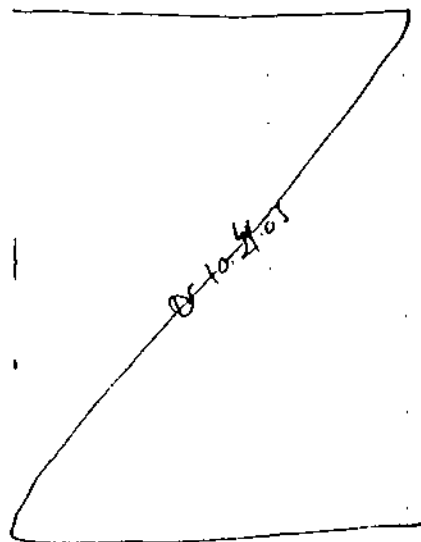
DAVID SIEGELMAN

10.23.03 → David Siegelman

1
ALLEY #107
LIBBY ASBESTOS PROJECT EPA REG 8/VOLPE
10-24-03
ALLEY #107

10:00 ON SITE ALLEY #107
DIMENSIONS: 301 FT x 14 FT
CONSTRUCTION: ASPHALT PAVED,
POOR CONDITION, VERY SOFT
IN MOST PARTS, POTHOLES
PERIMETER: RESIDENTIAL

- ① NO VISIBLE VERMICULITE
IN THE AREA ~~8-10-14-03~~
② NO SAMPLING REQUIRED ON
PAVED ALLEYS ~~8-10-14-03~~



LOUISIANA AVE

LARCH ST.

MONTANA AVE

E. SPRUCE ST.

DAVID SPIELMAN — 10-24-03 — David Spielman

5
ALLEY #109
LIBBY ASBESTOS PROJECT EPA REG 8/VOLPE
10-24-03
ALLEY #109

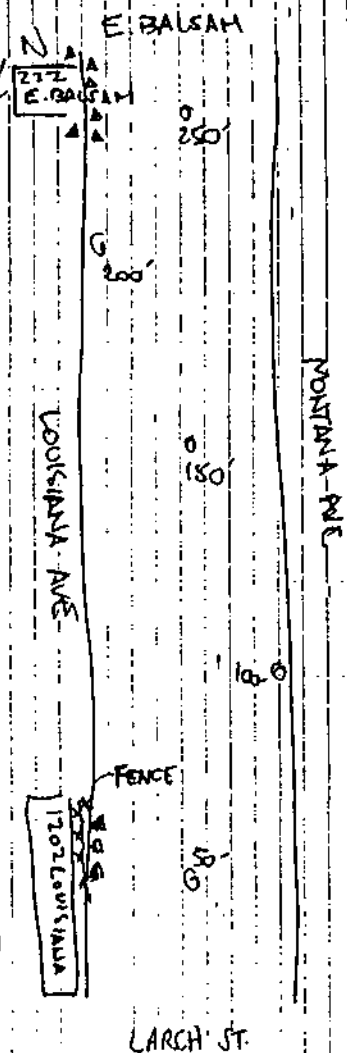
10:12 ON SITE ALLEY #109
DIMENSIONS: 342 FT x 14 FT
CONSTRUCTION: PACKED SOIL
AND GRAVEL ~~8-10-24-03~~
PERIMETER: RESIDENTIAL

SAMPLE TIME
10:20

CS- 18360

SP- 124457 ~~8-10-24-03~~

- ① VISIBLE VERMICULITE
IN TWO LOCATIONS —
MONG GRASS AT S.E. CORNER
"HEAVY" CONCENTRATION,
ASSOCIATED W/ 222 E. BALSAM.
"MED" CONCENTRATION OF
SMALL FLAKES EXPOSED AT
FENCE ASSOCIATED WITH
1202 LOUISIANA AVE.
② FSDS# CSS-J-006132
③ GPS# T2A10243
④ SAMPLING EQUIPMENT LI
DECONTAMINATED PER SAP



DAVID SPIELMAN — 10-24-03 — David Spielman

16

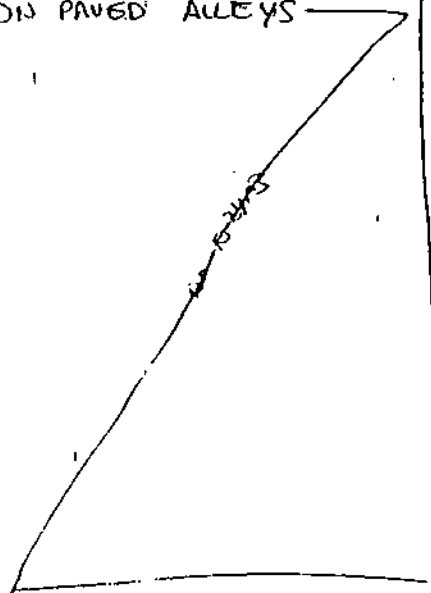
ALLEY # 112

10-24-03

LIBBY ASBESTOS PROJECT EPA REG-8/VOLPE
ALLEY # 112

10:31 ALLEY # 112 ON SITE
 DIMENSIONS 340FT X 14FT
 CONSTRUCTION: ASPHALT PAVED
 FAIR CONDITION, GRAVEL
 COVER/HOLE FILL #10-24-03
 PERIMETER RESIDENTIAL

- ① NO VISIBLE VERMICULITE
 IN THE AREA #10-24-03
 ② NO SAMPLING REQUIRED
 ON PAVED ALLEYS



POPLAR ST

LOUISIANA AVE

NOSTANA AVE

E. BAUSAM ST

DAVID SPIELMAN - 10-24-03 - David Spielman

ALLEY # 114

10-24-03

LIBBY ASBESTOS PROJECT EPA REG-8/VOLPE
ALLEY # 114

10:41 ON SITE ALLEY # 114
 DIMENSIONS: 330FT X 12FT
 CONSTRUCTION: PARTIALLY
 PAVED (1ST 90FT. FROM
 NORTH SIDE) WITH ASPHALT
 - REMAINDER IS PACKED
 SOIL AND GRAVEL #10-24-03
 PERIMETER: RESIDENTIAL

CS- 18361

SP- 124458

SAMPLE TIME
10:50

- ① NO VISIBLE VERMICULITE
 ② SAMPLING EQUIPMENT IS
 DECONTAMINATED AS PER SRP
 ③ PSDS # CSS-S-006132
 ④ GPS # T2B10243

ADDITIONAL NOTES - NO
 SAMPLE COLLECTED AT THE
 PAVED PORTION OF THE ALLEY

10-24-03

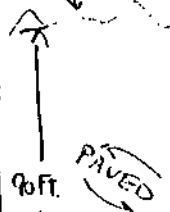
DAVID SPIELMAN - 10-24-03 - David Spielman

CEDAR ST

LOUISIANA AVE

NOSTANA AVE

50'



POPLAR ST

ALLEY #113

10-24-03

LIBBY ASBESTOS PROJECT EPA REG 8/VOLPE

ALLEY #113

11:00 ON SITE ALLEY #113

DIMENSIONS 308 FT X 16 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL — 05-10-03

PERIMETER: RESIDENTIAL

SAMPLE TIME
11:11

CS- 18362

SP- 124459

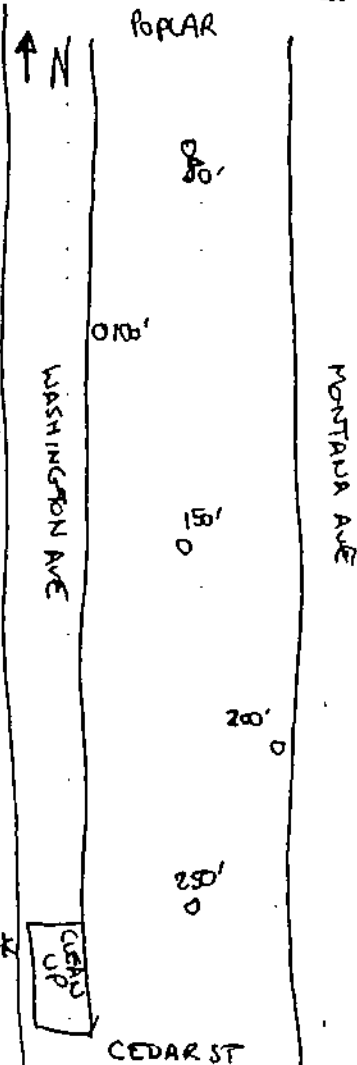
① NO VISIBLE VERMICULITE

② SAMPLING EQUIPMENT IS
DECONTAMINATED AS PER SAP

③ FSDS# CSS-S-006132

④ GPS# T2C10243

ADDITIONAL NOTES: LARGE
YARD CLEANUP AT LOG CABIN
ON SW CORNER (CORNER OF
CEDAR AND WASHINGTON NE
CORNER) - YARD IS BARE SOIL
IN FRONT AND FRESH SOIL IN BACK
NO VISIBLE VERMICULITE IN
THE AREA — 05-10-03



DAVID SPIELMAN — 10-24-03 — David Spielman

ALLEY #111

10-24-03

LIBBY ASBESTOS PROJECT EPA REG 8/VOLPE

ALLEY #111

11:28 ON SITE ALLEY #111

DIMENSIONS 343 FT X 12 FT

CONSTRUCTION: PACKED SOIL

AND GRAVEL — 05-10-03

PERIMETER: RESIDENTIAL

SAMPLE TIME
11:47

CS- 18363

SP- 124460

① VISIBLE VERMICULITE ALONG

GRASS AT NW CORNER,
IN YARD OF 1303 WASHINGTON

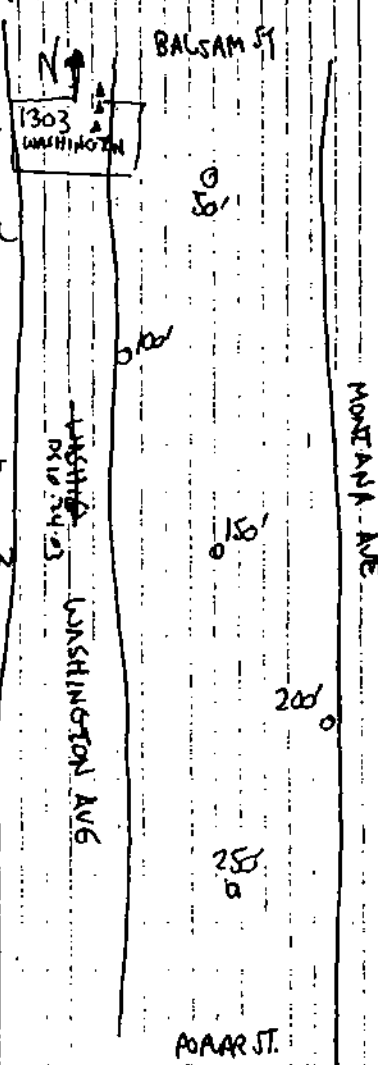
(MED" CONCENTRATION)
IS ON OR ADJACENT TO
GRASS STRIP IN ALLEY,
MAY BE CONFINED TO YARD
ONLY — 05-10-03

② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP

③ FSDS# CSS-S-006133

④ GPS# T2D10243

— 05-10-03 —



DAVID SPIELMAN — 10-24-03 — David Spielman

ALLEY 11-108

10-24-03¹¹

LIBBY ASBESTOS PROJECT EPA REG-8/NOPE

14:00 ON SITE ALLEY 11-108

DIMENSIONS 267 FT X 14 FT

CONSTRUCTION PAVED SOIL

AND GRAVEL #10-24-03

PERIMETER: RESIDENTIAL

CS- 18364

SP- 124821

① NO VISIBLE VERMICULITE

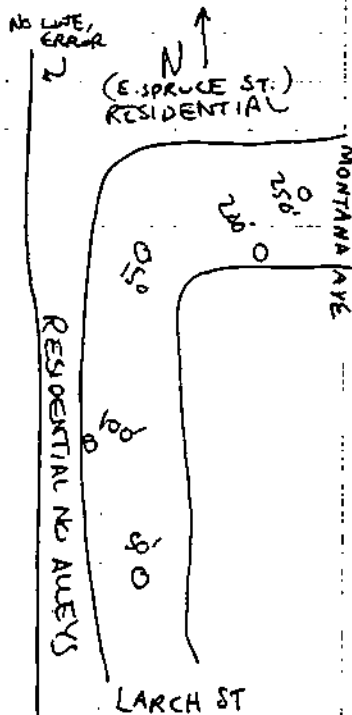
② SAMPLING EQUIPMENT

IS DECONTAMINATED PER SAP

③ FSDS # CSS-S-006133

④ GPS # TZE10243

ADDITIONAL NOTES: NONE



SAMPLE TIME

14:07

DAVID SAEUMAN - 10-24-03

David Saeuman

12

ALLEY #110

LIBBY ASBESTOS PROJECT

10-24-03
EPA REG 8/VOLPE

14:14 ON SITE ALLEY #110

DIMENSIONS 346 X 12 FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL

PERIMETER: RESIDENTIAL

SAMPLE TIME
14:22

CS- 18365

SP- 124822

① VISIBLE VERMICULITE
IN GRASS ALONG N.E.
CORNER OF ALLEY, OUTSIDE
FENCED GARDEN (FULL
OF VERMICULITE) AT
1212 MONTANA AVE.

② SAMPLE EQUIPMENT IS
DECONTAMINATED PER SAP

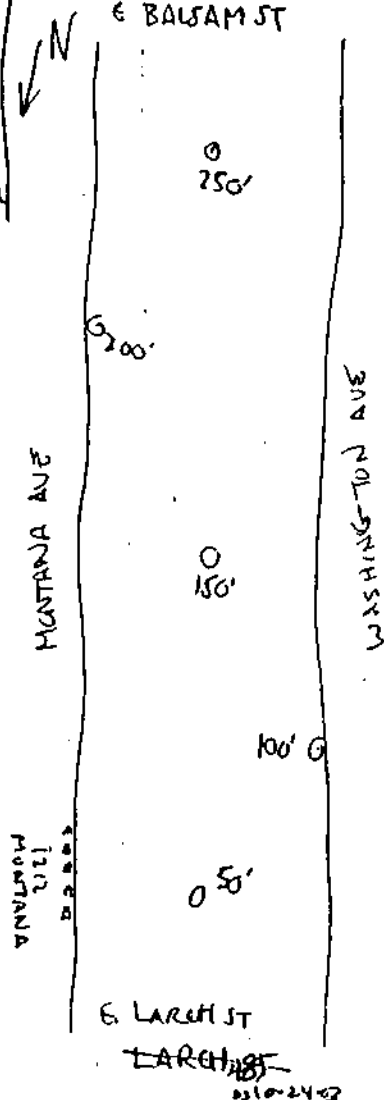
③ FSDS# CS-006133

④ GPS# T2F10243

ADDITIONAL NOTES:
VERMICULITE IS UNDER
VERY THICK GRASS →

05-10-24-03

DAVID SPIELMAN - 10-24-03 - David Spielman



ALLEY #124

LIBBY ASBESTOS PROJECT EPA REG 8/VOLPE

10-24-03

14:35 ON SITE ALLEY #124

DIMENSIONS 357 FT X 14 FT

CONSTRUCTION PACKED SOIL

AND GRAVEL - 05-10-24-03

PERIMETER RESIDENTIAL

SAMPLE TIME
14:48

CS- 18366

SP- 124823

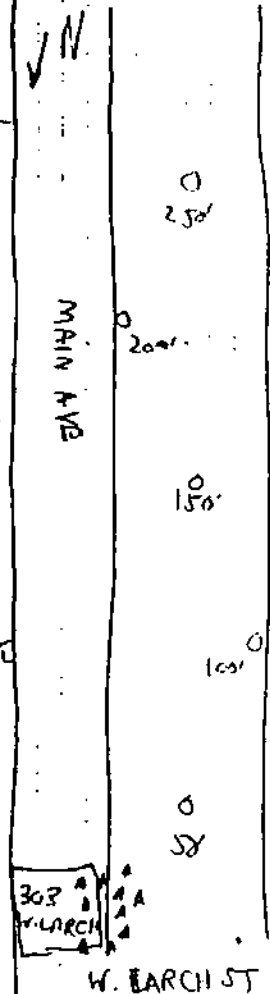
① VISIBLE VERMICULITE IN GRASS
AND IN ALLEY (ON SURFACE)
ASSOCIATED WITH 'HEAVY'
CONCENTRATION IN GARDEN AT
303 W. LARCH - FENCE POSTS
UP BUT NO FENCE - VERMICULITE
ALSO VISIBLE IN GARDEN (SEE
SKETCH) MID-WEST SLOPE OF
ALLEY BUT NONE ON GRASS
IN ALLEYWAY - 05-10-24-03 -

② SAMPLING EQUIPMENT IS
DECONTAMINATED PER SAP

③ FSDS# CS-S-006133

④ GPS# T2G10243

N. BALSAM ST



DAVID SPIELMAN - 10-24-03 - David Spielman

ALLEN#125

10-24-03

LIBBY ASBESTOS PROJECT EPA REG/VOLUME

14:50 ON SITE ALLEY #125

DIMENSION 178 FT X 15 FT

CONSTRUCTION: PACKED

SOIL AND GRAVEL, GRASS

PERIMETER: RESIDENTIAL

(THREE BACKYARDS)

SAMPLE TIME
AWAY 125
15:07

CS- 18367

SP- 124824

SAMPLE TIME
DUPLICATE
15:12

CS- 18368

SP- 124824

- ① NO VISIBLE VERMICULITE
- ② SAMPLING EQUIPMENT IS DECONTAMINATED PER SAP
- ③ FSDS# CS-5-026134
- ④ GPS # TZ H10243

ADDITIONAL NOTES: NONE

2010-29-03

DAVID SPIELMAN - 10-24-03 - *David Spielman* DAVID

DELE:

L135'

A1

- 504

AB DE

உலக அமைதி

BLANK

15:30

- SA

ACBZ

$$DS + D^2$$

True

DS 2C

Appendix B

Completed Soil Field Sample Data Sheets

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100289 Page No.: 22/23/24/25 Sampling Date: 10-15-03
Address: CITY OF LIBBY ALLEY Owner Tenant: CITY OF LIBBY
Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other Names: ZAMBRANO/SPELMAN

Data Item	Sample 1	Sample 2	Sample 3
Index ID	<u>CS- 17947</u>	<u>CS- 17948</u>	<u>CS- 17949</u>
Location ID	<u>SP- 124353</u>	<u>SP- 124354</u>	<u>SP- 124355</u>
Sample Group	<u>ALLEY</u>	<u>ALLEY</u>	<u>ALLEY</u>
Location Description (circle)	Back yard Front yard Side yard <u>ALLEY</u> Driveway <u>#1</u> Other <u>DW DISC</u>	Back yard Front yard Side yard <u>ALLEY</u> Driveway <u>#1</u> Other <u>DW DISC</u>	Back yard Front yard Side yard <u>ALLEY</u> Driveway <u>#5</u> Other
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other	<u>Surface Soil</u> Other	<u>Surface Soil</u> Other
Type (circle)	Grab <u>Comp.</u> # subsamples <u>4</u>	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>
Sample Time	<u>15:11</u>	<u>15:40</u>	<u>16:37</u>
Top Depth (in.)	<u>0</u>	<u>0</u>	<u>0</u>
Bottom Depth (in.)	<u>6</u>	<u>6</u>	<u>6</u>
Field Comments Note if vermiculite is visible in sampled area	<u>BD- 15-15-03</u> <u>NO L.V. IN SAMPLE</u> <u>Alley #1</u>	<u>BD-</u> <u>NO L.V. IN SAMPLE</u> <u>Alley #2</u>	<u>BD-</u> <u>NO L.V. IN SAMPLE</u> <u>Alley #5</u>
Entered (LFO) <u>PS</u>	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DS</u>	QC by <u>DZ</u>
--	------------------------	-----------------

DW
10/15/03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100239 Page No.: 22/23124/15 Sampling Date: 10-15-03
Address: CITY OF LIBBY ALLEY Owner/Tenant: CITY OF LIBBY

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: ZAMBRANO / SELMAN

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17950	CS- 17951	
Location ID	SP- 124356	SP- 124357	
Sample Group	<u>ALLEY</u>	<u>ALLEY</u>	
Location Description (circle)	Back yard Front yard Side yard Driveway Other <u>ALLEY #6</u>	Back yard Front yard Side yard Driveway Other <u>ALLEY #7</u>	Back yard Front yard Side yard Driveway Other
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	<u>Grab</u> Comp. # subsamples <u>5</u>	<u>Grab</u> Comp. # subsamples _____	<u>Grab</u> Comp. # subsamples _____
Sample Time	<u>17:10</u>	<u>17:16</u>	
Top Depth (in.)	<u>0</u>	<u>0</u>	
Bottom Depth (in.)	<u>6</u>	<u>6</u>	
Field Comments Note if vermiculite is visible in sampled area	<u>BD- 10-15-03</u> NO L.V. OBSERVED IN SAMPLE <u>Alley #6</u>	<u>BD- 10-15-03</u> NO L.V. OBSERVED IN SAMPLE <u>Alley #7</u>	<u>BD- 10-15-03</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by NS

QC by J. Z

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 30-32 Sampling Date: 10-16-03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) ~~Residential~~ School Commercial Mining Roadway Other ()Sampling Team: (circle) GDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17952	CS- 17953	CS- 17954
Location ID	SP- 124358	SP- 124359	SP- 124360
Sample Group	Alley <u># 8</u>	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>2</u>	Grab <u>Comp.</u> # subsamples <u>4</u>	Grab <u>Comp.</u> # subsamples <u>5</u>
Sample Time	<u>10:16</u>	<u>10:35</u>	<u>11:10</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>8</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>126</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>9</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DJQC by D.Z

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 34-35 Sampling Date: 10/16/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17955	CS- 17956	CS- 17957
Location ID	SP- 124381	SP- 124382	SP- 124383
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>4</u>	Grab <u>Comp.</u> # subsamples <u>4</u>	Grab <u>Comp.</u> # subsamples <u>4</u>
Sample Time	<u>11:35</u>	<u>11:45</u>	<u>1320</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>10</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>11</u> Vermiculite observed: yes or <u>no</u> <u>no vermiculite observed</u> <u>in sample</u>	Alley # <u>12</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DSdw
10-16-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100239 Page No: 38-40 Sampling Date: 10/16/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17958	CS- 17959	CS- 17960
Location ID	SP- 124384	SP- 124385	SP- 124386
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway Other: Alley	Back yard Front yard Side yard Driveway Other: Alley	Back yard Front yard Side yard Driveway Other: Alley
Category (circle)	FS FD of Field Blank (lot or equipment)	FS FD of Field Blank (lot or equipment)	FS FD of Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other	Surface Soil Other	Surface Soil Other
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1352	1412	1428
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # 13 Vermiculite observed: yes or no	Alley # 14 Vermiculite observed: yes or no	Alley # 15 Vermiculite observed: yes or no
Entered (LFO)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Entered Validated

For Field Team Completion
(Provide Initials)

Completed by

QC by

dw
10-16-03

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

PAGE 40, 41, 43

Scenario No.: NA Field Logbook No: 100289 Page No: 39 Sampling Date: 10/16/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17961	CS- 17962	CS- 17963
Location ID	<u>SP-12436</u> <u>SP- 124387</u> <u>DS 10-16-03</u>	<u>SP- 124387</u>	<u>SP- 124388</u> <u>DS 10-16-03</u>
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway Other <u>Alley</u>	Back yard Front yard Side yard Driveway Other <u>Alley</u>	Back yard Front yard Side yard Driveway Other <u>Alley</u>
Category (circle)	<u>ES</u> <u>DS 10/16/03</u> <u>FD of CS-17960</u> <u>Field Blank (lot or equipment)</u>	<u>ES</u> <u>FD of _____</u> <u>Field Blank (lot or equipment)</u>	<u>FS</u> <u>FD of _____</u> <u>Field Blank (lot or equipment)</u>
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> <u>DS 10/16/03</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>1432</u>	<u>1459</u>	<u>16:06</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>7615</u> <u>DS 10-16-03</u> Vermiculite observed: yes or <u>no</u> <u>RESIDENTIAL AREA</u>	Alley # <u>16</u> Vermiculite observed: yes or <u>no</u> <u>RESIDENTIAL AREA</u>	Alley # <u>19</u> Vermiculite observed: yes or <u>no</u> <u>COMMERCIAL AREA</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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DS
10-16-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 45/47 Sampling Date: 10/16/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (—)Sampling Team: (circle) CDM MACTEC Other — Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17964	CS- 17965	CS- 17966
Location ID	SP- 124389	SP- 124390	SP- 124391
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>2</u>	Grab <u>Comp.</u> # subsamples <u>2</u>	Grab <u>Comp.</u> # subsamples <u>4</u>
Sample Time	<u>16:32</u>	<u>16:59</u>	<u>17:10</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>21</u> Vermiculite observed: yes or <u>no</u> MIXED RESIDENTIAL + COMMERCIAL	Alley # <u>127</u> Vermiculite observed: yes or <u>no</u> MIXED RESIDENTIAL + COMMERCIAL ASPHALT PAVING - AT END OF ALLEY 10-16-03	Alley # <u>128</u> Vermiculite observed: yes or <u>no</u> MIXED RESIDENTIAL + COMMERCIAL ASPHALT PAVED AT END END
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>D-Z</u>	QC by <u>AS</u>
---	-------------------------	-----------------

dw
10-16-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 48 Sampling Date: 10-16-03

Address: City of Libby ^{DS 10-16-03} 318 LOUISIANA AVE Owner/Tenant CDM City of Libby ^{DS 10-16-03}

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17967 ^{DS 10-16-03}		
Location ID	<u>AD-000001</u> <u>DD-DS 10-16-03</u>		
Sample Group	<u>BLANK Alley</u> ^{DS 10-16-03}	<u>Alley</u>	<u>Alley</u>
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u> ^{NA DS 10-16-03}	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	FS FD of _____ <u>Field Blank</u> (lot or equipment)	FS FD of _____ <u>Field Blank</u> (lot or equipment)	FS FD of _____ <u>Field Blank</u> (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil <u>Other: SAND</u>	Surface Soil <u>Other</u>	Surface Soil <u>Other</u>
Type (circle)	<u>Grab</u> Comp. # subsamples _____	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	<u>17:28</u>		
Top Depth (in.)	<u>0</u>	<u>0</u>	<u>0</u>
Bottom Depth (in.)	<u>6</u>	<u>6</u>	<u>6</u>
Field Comments Note if vermiculite is visible in sampled area	<u>Alley # _____</u> ^{DS 10-16-03} <u>Vermiculite observed: yes or no</u> ^{DS 10-16-03} <u>YES</u> <u>EQUIPMENT BLANK</u>	<u>Alley # _____</u> <u>Vermiculite observed: yes or no</u>	<u>Alley # _____</u> <u>Vermiculite observed: yes or no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by DS

QC by DZ

DS
10-16-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 00289 Page No: 50-52 Sampling Date: 10/17/03Address: City of Libby Alley Owner/Tenant: City of LibbyBusiness Name: NA or 10-17-03Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17968	CS- 17969	CS- 17970
Location ID	SP- 124392	SP- 124393	SP- 124394
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp</u> # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>2</u>	Grab Comp. # subsamples <u>5</u>
Sample Time	<u>09:40</u>	<u>09:53</u>	<u>10:45</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>23</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>24</u> Vermiculite observed: yes or <u>no</u> <u>PARTIALLY PAVED ALLEY</u>	Alley # <u>29</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZ QC by DS

dw
10-17-03

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100289 ^{56,57,58} Page No: Sampling Date: 10/17/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA DO 10.17.03

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17971	CS- 17972	CS- 17973
Location ID	SP- 124395	SP- 124396	SP- 124397
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of <u> </u> Field Blank (lot or equipment)	<u>FS</u> FD of <u> </u> Field Blank (lot or equipment)	<u>FS</u> FD of <u> </u> Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other <u> </u>	<u>Surface Soil</u> Other <u> </u>	<u>Surface Soil</u> Other <u> </u>
Type (circle)	<u>Grab</u> <u>Comp. # subsamples 2</u>	<u>Grab</u> <u>Comp. # subsamples 2</u>	<u>Grab</u> <u>Comp. # subsamples 2</u>
Sample Time	11:13	11:42	13:51
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>30</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>31</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>32</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) <u> </u>	Volpe: <u> </u> Entered <u> </u> Validated <u> </u>	Volpe: <u> </u> Entered <u> </u> Validated <u> </u>	Volpe: <u> </u> Entered <u> </u> Validated <u> </u>

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100289 Page No: 62 Sampling Date: 10/17/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17974	CS- 17975	CS- 17976
Location ID	SP- 124398	SP- 124399	SP- 124400
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other</u> Alley	Back yard Front yard Side yard Driveway <u>Other</u> Alley	Back yard Front yard Side yard Driveway <u>Other</u> Alley
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>
Sample Time	<u>15:47</u>	<u>16:50</u>	<u>17:10</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>42</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>43</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>44</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DS</u>	QC by <u>DZ</u>
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dw
10-17

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 6265 Sampling Date: 10/17/03
 Address: City of Libby Alley 318 LOUISIANA AVE Owner/Tenant: City of Libby CDM
 Business Name: NA
 Land Use: (circle) Residential School Commercial Mining Roadway Other ()
 Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17977		
Location ID	<u>10/17/03</u> <u>BD - 000001</u> <u>AD</u>		
Sample Group	<u>Blank</u> <u>Alley</u>	<u>Alley</u>	<u>Alley</u>
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway Other: Alley	Back yard Front yard Side yard Driveway Other: Alley
Category (circle)	FS FD of _____ <u>Field Blank (lot or equipment)</u>	FS FD of _____ <u>Field Blank (lot or equipment)</u>	FS FD of _____ <u>Field Blank (lot or equipment)</u>
Matrix Type (Surface soil unless other wise noted)	Surface Soil <u>Other: SAND</u>	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	<u>Grab</u> Comp. # subsamples _____	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	<u>17:24</u>		
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # _____ Vermiculite observed: yes or no <u>BLANK</u>	Alley # _____ Vermiculite observed: yes or no	Alley # _____ Vermiculite observed: yes or no
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by DS

QC by DZ

dw
10.17

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 68, 69, 70 Sampling Date: 10/12/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17978	CS- 17979	CS- 17980
Location ID	SP- 124101	SP- 124402	SP- 124403
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp</u> # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>5</u>
Sample Time	<u>10:21</u>	<u>11:01</u>	<u>11:28</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>46</u> Vermiculite observed: <u>yes</u> or no ALONG S.W. CORNER OF ALLEY	Alley # <u>47</u> Vermiculite observed: <u>yes</u> or <u>no</u> (TRACE)	Alley # <u>48</u> Vermiculite observed: <u>yes</u> or no
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZ QC by DS

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 ^{71, 72, 73} Page No: 73 ^{02/18/03} Sampling Date: 10/18/03
Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17981	CS- 17982	CS- 17983
Location ID	SP- 124404	SP- 124405	SP- 124406
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>
Sample Time	<u>1341</u>	<u>14:09</u>	<u>14:28</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>49</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>50</u> Vermiculite observed: <u>yes</u> or no	Alley # <u>51</u> Vermiculite observed: <u>yes</u> or no <u>Observed one flake</u> <u>on east side of alley</u> <u>NO LID IN SAMPLE</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by D. Z

QC by D

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No.: 100284 Page No.: 74-75 Sampling Date: 10/12/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17984	CS- 17985	
Location ID	SP- 124407	SP- 124408	
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway Other: Alley
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	Surface Soil Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab Comp. # subsamples _____
Sample Time	<u>7:44</u> <u>1504</u>	<u>14:46</u>	
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>32# 53</u> <u>DS 10-18-03</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>32# 52</u> <u>DS 10-18-03</u> Vermiculite observed: yes or <u>no</u>	Alley # _____ Vermiculite observed: yes or no
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D. Z QC by Ndw
10-18-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100289 Page No.: 76 Sampling Date: 10/18/03

Address: City of Libby Alley Owner/Tenant: City of Libby C.D.M.

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17986		
Location ID	<u>AD-000001</u>		
Sample Group	<u>Blank</u> Alley <u>DS 10-18-03</u>	<u>Alley</u>	<u>Alley</u>
Location Description (circle)	Back yard Front yard Side yard Driveway Other: <u>Alley</u> <u>Blank</u> <u>DS 10-18-03</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>
Category (circle)	FS FD of _____ Field <u>Blank</u> (lot or <u>equipment</u>)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field <u>Blank</u> (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other <u>Soil</u>	Surface Soil Other _____	Surface Soil Other <u>Soil</u>
Type (circle)	<u>Grab</u> Comp. # subsamples _____	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	<u>15:30</u>		
Top Depth (in.)	<u>0</u>	<u>0</u>	<u>0</u>
Bottom Depth (in.)	<u>6</u>	<u>6</u>	<u>6</u>
Field Comments Note if vermiculite is visible in sampled area	Alley # _____ Vermiculite observed: yes or no <u>Blank</u> <u>DS 10-18-03</u>	Alley # _____ Vermiculite observed: yes or no	Alley # _____ Vermiculite observed: yes or no
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by DS

QC by JRM

DS
10-18-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100289 Page No: 78-79-80 Sampling Date: 10/20/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17987	CS- 17988	CS- 17989
Location ID	SP- 124409	SP- 124410	SP- 124411
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>0923</u>	<u>0948</u>	<u>1015</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>54</u> <u>55</u> <u>03 10-20-03</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>54</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>54</u> <u>56</u> <u>02 10/20/03</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DSdw
10/20/03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 33,35,36 Sampling Date: 10/29/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17990	CS- 17991	CS- 17992
Location ID	SP- 124412	SP- 124413	SP- 124414
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>1058</u>	<u>14:01</u>	<u>14:22</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>59</u> Vermiculite observed: <u>yes</u> or no <u>ALONG-SIDE FENCE/GARDEN SW CORNER</u>	Alley # <u>60</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>62</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DSdw
102003

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 10229 Page No: 8723 Sampling Date: 10/20/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17993	CS- 17994	CS- 17995
Location ID	SP- 124414	SP- 124415	SP- 124416
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	FS <u>FD of CS-17992</u> Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>	Grab <u>Comp.</u> # subsamples <u>5</u>
Sample Time	<u>14:14</u>	<u>1438</u>	<u>1500</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>62 Dup</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>63 #</u> Vermiculite observed: <u>yes</u> or no SMALL STY IN GRASS AT SW CORNER OF ALLEY	Alley # <u>61 #</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by D.Z QC by WJ

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100229 Page No.: 89, 90, 91 Sampling Date: 10/26/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDMP MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17996	CS- 17997	CS- 17998
Location ID	SP- 124417	SP- 124418	SP- 124419
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp</u> # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>5</u>
Sample Time	<u>15:23</u>	<u>15:40</u>	<u>1630</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>64</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>65</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>66</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D.Z QC by DRdlw
10/26/03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 20289 Page No.: 92, 93, 94 Sampling Date: 10/20/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17999	CS- 18000	CS- 18001
Location ID	SP- 124470	SP- 124471	AD-000001 05.10.20.03
Sample Group	Alley	Alley	Alley NA
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u> NA
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	FS FD of _____ <u>Field Blank</u> (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	Surface Soil <u>Other</u> SAND
Type (circle)	Grab <u>Comp. # subsamples 3</u>	Grab Comp. # subsamples <u>5</u>	<u>Grab</u> Comp. # subsamples _____
Sample Time	<u>1653</u>	<u>17:14</u>	<u>1732</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>67#</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>68#</u> Vermiculite observed: yes or <u>no</u>	Alley # _____ Vermiculite observed: yes or no <u>BLANK</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZ QC by ASdw
10/20/03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 100289 Page No.: 96,97,98 Sampling Date: 10/21/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Spielman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18002	CS- 18003	CS- 18004
Location ID	SP- 12442	SP- 124423	CP- 12512
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>0922</u>	<u>0943</u>	<u>10:20</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>68 # 69</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>70 #</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>71 #</u> Vermiculite observed: <u>yes</u> or no ALONG GRASS AT NW CORNER OF ALLEY
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DS

dw
10-31-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100229 Page No: 101-104 ¹⁰³ Sampling Date: 10/21/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18005	CS- 18006	CS- 18007
Location ID	SP- 124425	SP- 124426	SP- 124427
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 3</u>
Sample Time	<u>11:36</u>	<u>10:30</u> <u>7:42</u> <u>14:32</u>	<u>15:23</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>75</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>78</u> Vermiculite observed: <u>yes</u> or no NEW AS 10-21-03 LARGE QTY VISIBLE VERMICULITE AT SE CORNER OF ALLEY ALONG THE GRASS	Alley # <u>79</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by DZ QC by DS

DS
10-21-03

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100229 Page No: 107-109 Sampling Date: 10/24/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18008	CS- 18009	CS- 18010
Location ID	SP- 124423	SP- 124429	SP- 124430
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 3</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>1521</u>	<u>1640</u>	<u>1709</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>80 #</u> Vermiculite observed: <u>yes</u> or no <u>WEST SIDE OF PIZZA HUT</u> <u>SMALL PATCH QUANTITY</u> <u>AS 10-21-03</u>	Alley # <u>82 #</u> Vermiculite observed: <u>yes</u> or no <u>HEAVY CONCENTRATION OF</u> <u>VERMICULITE ALONG</u> <u>GRASS STRIP RIGHT NEXT</u> <u>SEE SKETCH</u>	Alley # <u>83 #</u> Vermiculite observed: <u>yes</u> or no <u>HEAVY CONCENTRATION OF</u> <u>VERMICULITE ALONG</u> <u>GRASS STRIP RIGHT NEXT</u> <u>SEE SKETCH</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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dw
10-21-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 109-110 Sampling Date: 10/21/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18011	CS- 18012	
Location ID	SP- 124431	AD - 000001	
Sample Group	Alley	<u>Alley Blank</u>	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u> NA 21.10.21-03	Back yard Front yard Side yard Driveway Other: <u>Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ <u>Field Blank</u> (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other <u>SAND</u>	<u>Surface Soil</u> Other _____
Type (circle)	<u>Grab</u> <u>Comp.</u> # subsamples <u>5</u>	<u>Grab</u> Comp. # subsamples _____	<u>Grab</u> Comp. # subsamples _____
Sample Time	<u>17:34</u>	<u>17:46</u>	
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>24</u> Vermiculite observed: <u>yes</u> or no	Alley # _____ Vermiculite observed: <u>yes</u> or no BLANK	Alley # _____ Vermiculite observed: <u>yes</u> or no
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D.Z.QC by DS

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 112, 113, 114 Sampling Date: 10/22/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18013 <u>10/22/03</u>	CS- 13014 <u>10/22/03</u>	CS- 18015 <u>10/22/03</u>
Location ID	JP- 124432 <u>10/22/03</u> <u>DZ</u>	SP- 124433 <u>10/22/03</u> <u>DZ</u>	SP- 124434 <u>10/22/03</u> <u>DZ</u>
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>22 10/24/03</u> <u>Comp. # subsamples 6</u>	Grab <u>1008</u> <u>Comp. # subsamples 5</u>	Grab <u>1025</u> <u>Comp. # subsamples 5</u>
Sample Time	<u>0945</u>	<u>1008</u>	<u>1025</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>25 #</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>27 #</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>89 #</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion
(Provide Initials)

Completed by DZ

QC by DS

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100239 Page No: 115, 116, 117 Sampling Date: 10/22/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18016	CS- 18017	CS- 18018
Location ID	SP- 124435	SP- 124436	SP- 124437
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 6</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 12</u>
Sample Time	10:49	11:16	11:51
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>86 #</u> Vermiculite observed: <u>yes</u> or no <u>ALONG GRASS IN MIDDLE EAST SIDE OF ALLEY</u>	Alley # <u>90 #</u> Vermiculite observed: <u>yes</u> or no	Alley # <u>88 #</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>D. Z</u>	QC by <u>DS</u>
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CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 00289 Page No: 119/21/123 Sampling Date: 10/22/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18019	CS- 18020	CS- 18341
Location ID	SP- 124438	SP- 124439	SP- 124440
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>DS 10-22-03</u> <u>Comp. # subsamples 5</u>	Grab <u>7</u> <u>DS 10/22/03</u> <u>Comp. # subsamples 9</u>	Grab <u>5</u> <u>Comp. # subsamples 5</u>
Sample Time	<u>DS 10-22-03</u> <u>10:43</u>	<u>15:50</u> <u>10:43</u>	<u>1615</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>91</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>95</u> <u>10/22/03</u> Vermiculite observed: <u>yes</u> or <u>no</u> <u>SIDE EAST SIDE OF ALLEY ON 1022</u> <u>UTAH</u>	Alley # <u>96</u> <u>10/22/03</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DS

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 124/126/127 Sampling Date: 10/22/02Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18342 ⁴ _{10/22/02}	CS- 18343 ⁴ _{10/22/02}	CS- 18344 ⁴ _{10/22/02}
Location ID	SP- 124441	SP- 124442	AD- 000001
Sample Group	Alley	Alley	NA Alley 10/22/02
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley NA 10/22/02</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	FS FD of _____ <u>Field Blank</u> (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	Surface Soil <u>Other SAND</u>
Type (circle)	<u>Grab</u> <u>Comp. # subsamples 4</u>	<u>Grab</u> <u>Comp. # subsamples 4</u>	<u>Grab</u> Comp. # subsamples _____
Sample Time	<u>1630</u>	<u>17:02</u>	<u>1717</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>97#</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>100</u> Vermiculite observed: yes or <u>no</u>	Alley # _____ Vermiculite observed: yes or no <u>DS 10-22-02</u> <u>Blank</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>D. Z</u>	QC by <u>DS</u>
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dw
10-22-02

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100289 Page No: 130/137 Sampling Date: 10/23/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18345	CS- 18346	CS- 18347
Location ID	SP- 124443	SP- 124444	SP- 124445
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 6</u>	Grab <u>Comp. # subsamples 6</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>0947</u>	<u>10:13</u>	<u>10:35</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>102</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>119</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>121</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D. ZQC by PS

dw
10/23/03

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100229 Page No: 134, 135 Sampling Date: 10/23/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18348	CS- 18349	CS- 18350
Location ID	SP- 124446	SP- 124447	SP- 124447
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> <u>FD of CS-18349</u> Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 3</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>11:01</u>	<u>11:26</u>	<u>11:34</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>122</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>120 #</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>120</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D. ZQC by DJdw
10-23-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100-224 Page No: 131, 132, 133 Sampling Date: 10/23/03Address: City of Libby Alley Owner Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18351	CS- 18352	CS- 18353
Location ID	SP- 124448	SP- 124449	SP- 124450
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>11:44</u> 13:45	11:05	14:26
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>103</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>104</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>117</u> Vermiculite observed: <u>yes</u> or no in middle of alley at 171ft from North end
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D. Z. QC by DS

OKW
10/23/03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No.: 10289 Page No.: 10, 11, 12 Sampling Date: 10/23/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18354	CS- 18355	CS- 18356
Location ID	SP- 124452	SP- 124453	SP- 124454
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 3</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>15:02</u>	<u>15:20</u>	<u>15:39</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>105</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>106</u> Vermiculite observed: yes or <u>no</u>	Alley # <u>115</u> Vermiculite observed: yes or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by DZQC by DSdw
10-23-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100-229 Page No: 143-145 Sampling Date: 10-23-03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18357	CS- 18358	CS- 18359
Location ID	SP- 124455	SP- 124456	AD-000001
Sample Group	Alley	Alley	Blank Alley BLANK
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u> NA DS 10-23-03
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	FS FD of _____ <u>Field Blank (lot or equipment)</u>
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	Surface Soil <u>Other SAND</u>
Type (circle)	<u>Grab</u> <u>Comp. # subsamples 5</u>	<u>Grab</u> <u>Comp. # subsamples</u>	<u>Grab</u> <u>Comp. # subsamples</u>
Sample Time	15:59	16:32	17:10
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # 115 116 Vermiculite observed: <u>yes</u> or no "HEAVY" CONCENTRATION ALONG GRIDS AT NORTH END OF ALLEY	Alley # 123 Vermiculite observed: <u>yes</u> or <u>no</u>	Alley # _____ DS 10-23-03 Vermiculite observed: <u>yes</u> or no BLANK
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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DS
10-23-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 10292 Page No: 5, 7, 8 Sampling Date: 10/24/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18360	CS- 18361	CS- 18362
Location ID	SP- 124457	SP- 124458	SP- 124459
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	<u>Grab</u> <u>Comp. #</u> subsamples <u>5</u>	<u>Grab</u> <u>Comp. #</u> subsamples <u>4</u>	<u>Grab</u> <u>Comp. #</u> subsamples <u>5</u>
Sample Time	<u>10:20</u>	<u>10:50</u>	<u>11:11</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # 107 <u>109</u> <u>02 10/24/03</u> Vermiculite observed: <u>yes</u> or no ALONG GRASS AT S.E. CORNER AND N.E. SIDE	Alley # <u>114</u> Vermiculite observed: <u>yes</u> or <u>no</u>	Alley # <u>113</u> Vermiculite observed: <u>yes</u> or <u>no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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dw
10.24.03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100-292 Page No: 9111, Sampling Date: 10/24/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18363	CS- 18364	CS- 18365
Location ID	SP- 124460	SP- 124821	SP- 124822
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)	<u>ES</u> FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>	Grab <u>Comp. # subsamples 5</u>
Sample Time	<u>1147</u>	<u>14:07</u>	<u>1422</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>111 #</u> Vermiculite observed: <u>yes or no</u>	Alley # <u>108</u> Vermiculite observed: <u>yes or no</u>	Alley # <u>110 #</u> Vermiculite observed: <u>yes or no</u>
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D. ZQC by DS

dw
10-24-03

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100292 Page No: 1314 Sampling Date: 10/24/03Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18366	CS- 18367	CS- 18368
Location ID	SP- 124823	SP- 124824	SP- 124824
Sample Group	Alley	Alley	Alley
Location Description (circle)	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>	Back yard Front yard Side yard Driveway <u>Other: Alley</u>
Category (circle)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> FD of _____ Field Blank (lot or equipment)	<u>FS</u> <u>FD of CS-18367</u> Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	Grab Comp. # subsamples <u>5</u>	Grab <u>Comp</u> # subsamples <u>3</u>	Grab <u>Comp</u> # subsamples <u>3</u>
Sample Time	<u>14:48</u>	<u>15:07</u>	<u>15:12</u>
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	Alley # <u>124</u> Vermiculite observed: <u>yes</u> or no <u>N.E. CORNER OF ALLEY</u> <u>NEAR GRASS AND ON</u> <u>ALLEY SURFACE</u>	Alley # <u>125</u> Vermiculite observed: <u>yes</u> or no <u>(X)</u>	Alley # <u>125</u> Vermiculite observed: <u>yes</u> or no <u>(X)</u>
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion
(Provide Initials)Completed by D.Z QC by DS

DS
10.24.03

**CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL**

Scenario No.: NA Field Logbook No: 100292 Page No: 15 Sampling Date: 10/24/03

Address: City of Libby Alley Owner/Tenant: City of Libby

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ()

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano/Dave Speilman

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18369 <u>10/24/03</u> <u>AD</u>		
Location ID	<u>AD-200001</u>		
Sample Group	<u>BLANK Alley 10.24.03</u>	<u>Alley</u>	<u>Alley</u>
Location Description (circle)	Back yard Front yard Side yard Driveway Other: <u>Alley NA 10.24.03</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>	Back yard Front yard Side yard Driveway Other: <u>Alley</u>
Category (circle)	FS FD of <u>Field Blank (lot or equipment)</u>	FS FD of <u>Field Blank (lot or equipment)</u>	FS FD of <u>Field Blank (lot or equipment)</u>
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other: <u>SAND</u>	Surface Soil Other: _____	Surface Soil Other: _____
Type (circle)	<u>Grab</u> Comp. # subsamples _____	<u>Grab</u> Comp. # subsamples _____	<u>Grab</u> Comp. # subsamples _____
Sample Time	<u>15:30</u>		
Top Depth (in.)	<u>0</u>	<u>0</u>	<u>0</u>
Bottom Depth (in.)	<u>6</u>	<u>6</u>	<u>6</u>
Field Comments Note if vermiculite is visible in sampled area	<u>Alley # _____</u> <u>Vermiculite observed: yes or no</u> <u>BLANK</u>	<u>Alley # _____</u> <u>Vermiculite observed: yes or no</u>	<u>Alley # _____</u> <u>Vermiculite observed: yes or no</u>
Entered (LFO) _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____	Volpe: _____ Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by <u>DZ</u>	QC by <u>DS</u>
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DS
10.24.03

Appendix C

Verbal Interview Documentation

92

Location City of Libby, AlaskaDate 02/02/05Project / Client EPA/Volpe

CON: P. Ogem

City of LibbyContact: Don Thade

Authors: P. Ogem, Weather: 32°, overcast, wet, light
rain 9PE: Modified Level D. Gov. Doc: CSS AT
SAP Rev. 1, 2003, Activities: CSS Interview.

0932: Speak with Don Thade (Libby Public
works). Complete CSS interview. Complete EPF
form.

02/02/05

□ Soil samples collected (Date: NA)

(Refer to earlier sampling efforts by CDM)

LIBBY ASBESTOS PROJECT Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form (Primary IFF)

Field Logbook No.: 200319 Page No.: 92 Site Visit Date: 02/02/05
 Address: Libby City Alley City of Libby Structure Description: Alley
 Occupant: NA Phone Number: _____
 Owner (if different than occupant): Contact: Don Thede Phone Number: 293-1213
 Business Name: Libby Public Works Dept.
 Sampling Team: NA
 Field Form Check Completed by (100% of forms): _____
 Screening Field Check Completed by (2% of forms): _____

Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial <u>City</u>	
Surrounding Land Use	<u>Residential</u> Industrial <u>Commercial</u> School Mining Other: _____	
Year of Construction	<u>NA</u> Unknown	
Square Footage	<u>NA</u>	
Construction Material	Wood frame Masonry/Stone Other: <u>NA</u>	
Number of Floors Above Ground	1 2 3 Other: <u>NA</u>	
Number of Rooms Per Floor Above Ground	1: _____ 2: _____ 3: _____ Other: <u>NA</u>	
Basement	Yes <u>NA</u> No	
Heating Source	Wood/Coal Electric Propane/Gas Other: <u>NA</u>	
Heat Distribution	Forced air Radiant Other: <u>NA</u>	

Address: Libby City Alley - City of Libby Alley

BD# NA

Data Item	Value	Notes
Location of indoor vermiculite (circle all that apply)	Attic Walls Crawl Space None Visual In Living Space: Basement, Ground Floor, Second Floor, Attached Garage Other: <u>NA</u>	If in living space, provide specific location:
Outdoor Information <input type="checkbox"/> Outdoor Visual Inspection Complete: _____		
Location of outdoor vermiculite (circle all that apply)	Driveway Flowerbed Garden Yard Former Flowerbed Former Garden Stackpile None Other: <u>NA</u>	
Overall Assessment Complete: <u>NA</u> <input type="checkbox"/> Reconnaissance (Verbal Interview, Indoor, Outdoor Inspection)		
Are primary source materials present at the property?	Yes No <u>NA</u>	
Where are primary source materials located?	Inside Outside Both <u>NA</u>	NA applies if no primary source materials are located at the property.
<p>Below information is per interview with Dan Thede of Libby Public Works Dept. on 02/02/05</p> <p>ADDITIONAL INFORMATION (Note any partial access or sample collection issues)</p> <ul style="list-style-type: none"> • Time frame of downtown alley construction: late 1920's to early 1930's • No vermiculite was brought in as a subbase or surfacing material • Vermiculite was not used to fill in any ruts/holes/etc. • City maintenance schedule for alleys: fix as they need; alleys are patrolled twice per year. Any fill material needed for alleys is of the crushed variety from the City pit. • Other planned activities for alleys: trying to qualify for paving funds through the state matching program; downtown revitalization committee could also pave some of the alleys in the vicinity of Mineral Ave. in conjunction with their plans • Mr. Thede did not receive a single call or voiced concern from residents in regards to vermiculite in the alleys of downtown Libby. 		

CSS Primary Structure IFF (continued)

PO 02/02/03

Address:

~~Libby City Allay~~ City of Libby Allay

BD#

NA

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, structures, flowerbeds, utility poles, known underground utilities, suspected Libby amphibole source areas, sample locations, etc). Include north arrow.

NOT TO SCALE

NA

